

STATE PIPELINE COORDINATOR'S OFFICE



*Fiscal Year 2007
Lease Compliance
Monitoring Report*

ALASKA DEPARTMENT OF NATURAL RESOURCES

Executive Summary

The Fiscal Year 2007 *State Pipeline Coordinator's Office Lease Compliance Monitoring Report* describes the status of pipeline right-of-way leases issued by the State under Alaska Statute 38.35, the Alaska Right-of-Way Leasing Act, and one grant of right-of-way for a utility pipeline issued under Alaska Statute 38.05, the Alaska Lands Act. It is produced by the State Pipeline Coordinator's Office (SPCO), an agency within the Alaska Department of Natural Resources (ADNR) and affiliated with the Joint Pipeline Office (JPO).

The State fiscal year (FY) begins on July 1 and ends on June 30. FY07 began July 1, 2006 and ended June 30, 2007. This FY07 report includes information about the prior year's construction, operations, and maintenance activities for common carrier pipelines in Southcentral Alaska and on the North Slope. Summaries of ADNR's lease administration and compliance oversight activities related to those pipelines and rights-of-way are also included.

This report is intended for use by the public, government agencies, pipeline right-of-way lessees, and others interested in these pipelines.

Note that information about the Trans-Alaska Pipeline System (TAPS) is not contained in this report.

Acronyms and Abbreviations

All of the acronyms and abbreviations used in this report are defined in Appendix A.

Contact Information

Alaska Department of Natural Resources
State Pipeline Coordinator's Office
411 West 4th Avenue
Anchorage, Alaska 99501
(907) 257-1300

Cover Photo

This aerial photo of a beaded stream crossing was taken during the course of compliance oversight field surveillance of the Alpine Pipelines in July 2006. The three Alpine pipelines are covered in Chapter 3.

Unless otherwise indicated, all photographs in this report were taken by the SPCO Lease Compliance Oversight Team. All maps are adapted from maps available publicly through ADNR's Alaska Mapper.

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INTRODUCTION

I. Federal/State Joint Pipeline Office (JPO)

JPO Mission Statement

The Joint Pipeline Office, a consortium of State and federal agencies, regulates the Trans-Alaska Pipeline System and other Alaskan oil and gas pipelines in the best interests of the people of the nation and the State of Alaska. Safety, environmental protection, pipeline integrity, and regulatory compliance will be achieved through partnering with industry.



The State Pipeline Coordinator's Office is the lead State agency within the JPO. More information about the JPO is summarized in the *2006 State Pipeline Coordinator's Office Lease Compliance Monitoring Report*.

II. State Pipeline Coordinator's Office (SPCO)

The SPCO, an office within the Alaska Department of Natural Resources (ADNR), is responsible for administration and oversight of State pipeline right-of-way (ROW) leases issued under Alaska Statute 38.35, the *Alaska Right-of-Way Leasing Act*. Under AS 38.35, companies proposing to operate pipelines in whole or in part on State land must apply for and be granted a ROW lease prior to construction. Field gathering lines are exempt from AS 38.35.

The intent of the ROW Leasing Act is “...*the development, use and control of a pipeline transportation system be directed to make the maximum contribution to the development of the human resources of this State, the increase in the standard of living for all of its residents, the advancement of existing and potential sectors of its economy, the strengthening of free competition in its private enterprise system, and the careful protection of its incomparable natural environment.*”

The SPCO currently administers 16 existing ROW leases, one grant, and several proposed pipeline leases within Alaska. Lease administration and compliance oversight of TAPS is accomplished cooperatively by State and Federal agencies through the JPO. The remaining 15 active leases and one grant are administered only through the SPCO. Each State ROW lease is assigned a unique number according to the former Alaska Division of Lands (ADL) numbering system. The ADNR Land Administration System, accessible from the web at www.dnr.state.ak.us/las, is a resource where agencies, industry, and the public can obtain detailed information about ADNR case files including legal descriptions, status plats, and maps of State land in the ROW.

SPCO-administered pipeline ROW leases are listed in the table below. All leases are available on the SPCO website at www.jpo.doi.gov/SPCO/SPCO.htm.

<u>Pipeline Right-of-Way Leases</u>	<u>ADL No.</u>	<u>Status</u>
Alpine Oil Pipeline	415701	Operating
Alpine Diesel Pipeline	415932	Operating
Alpine Utility Pipeline (Grant)	415857	Operating
Badami Sales Oil Pipeline	415472	Discontinued of service as of August 2007
Badami Utility Pipeline	415965	Discontinued of service as of August 2007
Endicott Pipeline	410562	Operating
Glennallen-Palmer Spur Line	229297	Conditional lease; no pipeline constructed
Kenai Kachemak Pipeline	228162	Operating
Kuparuk Pipeline	402294	Operating
Kuparuk Pipeline Extension	409027	Operating
Milne Point Pipeline	410221	Operating
Milne Point Products Pipeline	416172	Discontinued service as of December 2006
Nikiski Alaska Pipeline	69354	Operating
Northstar Oil Pipeline	415700	Operating
Northstar Gas Pipeline	415975	Operating
Nuiqsut Natural Gas Pipeline	416202	Constructed; not operating
Oliktok Pipeline	411731	Operating
Trans-Alaska Gas System	413342	Conditional lease; no pipeline constructed
Trans-Alaska Pipeline System	63574	Operating
<u>Right-of-Way Applications</u>	<u>ADL No.</u>	<u>Status</u>
Alaska Natural Gas Transportation System	403427	Application
Dayville Road Pipeline A	229284	Application
Dayville Road Pipeline B	229285	Application
Dayville Road Pipeline C	229286	Application
Eastern North Slope Oil Pipeline	417577	Application
Eastern North Slope Gas Pipeline	417578	Application

Administration of pipeline ROW leases is accomplished by the SPCO ROW Section, which contains lease administration and compliance oversight teams.

Lease Administration Team

The SPCO lease administration team administers pipeline ROW leases and grants including processing lease assignments and transfers, reviewing and responding to correspondence, performing land status research, and participating in agency review of land sales, land conveyances, material sales and other reviews. The team processes ROW lease applications and amendments, implements public processes, issues project-specific authorizations, administers rental and other payments, reviews letters of non-objection, and performs other functions as necessary.

Compliance Oversight Team

The SPCO compliance oversight team is responsible for compliance oversight and monitoring of the 15 active non-TAPS State pipeline ROW leases issued under AS 38.35 and one utility pipeline grant issued under AS 38.05. The team's primary function is to document compliance with lease conditions and monitor select issues as determined by the ROW Section Chief and SPC. The program operates on a cyclical basis and consists of three main elements, further described in the following sections:

- 1) *Compliance Monitoring*: The team conducts field inspections called surveillances on a cyclical basis and reviews lessees' records.
- 2) *Annual Lessees' Reports*: Required by each ROW lease, the lessees submit reports annually which are reviewed by the compliance oversight team.
- 3) *Annual SPCO Lease Compliance Monitoring Report*: Produced by the compliance oversight team, the annual report provides an opportunity for the team to review both SPCO and lessee activities for the year and can be used to focus attention on specific topics as necessary.

1) Compliance Monitoring

The team evaluates compliance with lease requirements at a frequency prescribed by the SPC. At a minimum, rights-of-way for operating pipelines are inspected on a bi-annual basis. In the first year, the compliance oversight team looks at general lease compliance. In the second year, the team does more in-depth surveillance on a specific topic, such as corrosion. Approximately half of the leases get a general overview each year, while the other half get a more focused subject-specific surveillance. Each AS 38.35 pipeline receives some compliance monitoring each year, though out-of-service pipelines are not reviewed in as much detail as operating pipelines.

Lessees document compliance through quality assurance (QA) programs which are approved by the SPC. Though individual lease requirements vary, all SPCO-administered ROW leases require the lessee to develop a QA program or plan that provides evidence of compliance with lease stipulations and applicable laws. For

example, the Alpine Oil Pipeline lease defines a QA Program as "all those documented, planned, and systematic actions necessary to provide evidence that the Lessee is satisfying lease commitments and requirements for integrity of the Pipeline System, health, safety, and the environment."

An important element of maintaining compliance with lease conditions and stipulations is routine inspection of the pipeline and ROW. Lessee surveillance & monitoring programs are developed to prevent, detect, and abate conditions which could threaten pipeline integrity, the environment, or public health and safety. Some older leases refer to "surveillance and maintenance" programs, but all SPCO-administered leases require some pipeline and ROW monitoring. Revisions to QA and surveillance & monitoring programs are reviewed by SPCO staff and must be approved by the SPC prior to implementation.

In addition to oversight of lessees' QA and surveillance & monitoring activities, the compliance oversight team conducts field surveillance of pipelines and rights-of-way, meets with lessees to learn more about their programs, and reviews records provided by lessees. The products of a compliance oversight field visit or records review are: 1) Surveillance reports and 2) Surveillance field notes.

1) Surveillance Reports – After completion of a field visit or a records review, the surveillant prepares a report with a unique number which lists the lease or grant section, covenant, or stipulation applicable to the field visit or review. The surveillance report provides "Objective Evidence" to support a determination of *satisfactory (SAT)* or *unsatisfactory (UNSAT)* for the lessee's performance under that lease provision. Unsatisfactory conditions can be *minor* or *significant*. Usually when a surveillant makes an unsatisfactory determination, the lessee is given a deadline to correct the condition or to complete required follow-up. In FY07, the SPCO has adopted a new surveillance report numbering system for most pipelines (except TAPS), which lists the calendar year the report was finalized, SPCO to identify the office, S for Surveillance, and a sequential number. For example, 07-SPCO-S-001 describes the first surveillance report finalized in calendar year 2007. Some SPCO reports in FY07 were issued under a different numbering system, a system still used by the JPO for TAPS surveillance reports.

2) Surveillance Field Notes - One set of surveillance field notes for each field trip may be written by the surveillant(s) and attached to a surveillance report. Field notes are usually detailed and contain digital photographs of field conditions to support information contained in surveillance reports. For any given field visit, there will be one set of field notes but may be one to dozens of surveillance reports which correspond to the field notes. Field notes can also apply to more than one pipeline inspected on a single field trip, while surveillance reports apply to only one ROW case file.

Because each ROW lease contains different sections and stipulations, surveillance checklists are not directly comparable across leases. The number of surveillance reports produced is not always indicative of the scope of compliance monitoring for that pipeline. Sometimes field visits are focused on a specific topic, generating only a handful of detailed reports. Other surveillance trips are more general in nature and may generate dozens of surveillance reports with less detail. The SPCO Lease Compliance

Monitoring report and surveillance field notes provide additional compliance monitoring information to complement data from surveillance reports.

2) Annual Lessees' Reports

Annual comprehensive reports submitted by pipeline ROW lessees help the compliance team track pipeline issues and identify future surveillance priorities. The lessee's annual report, due January 31 for the preceding year, documents compliance with lease requirements and provides information about Pipeline Activities. The compliance oversight team reviews each lessee's report in detail and provides feedback. If a lessee's report does not meet minimum requirements, the team will request additional information. For information about the 2006 lessee reports, see Section IV, This Year's Compliance Oversight Activities. Requirements for annual reporting are listed in Appendix B.

3) Annual SPCO Lease Compliance Monitoring Report

The purpose of the Annual SPCO Lease Compliance Monitoring Report, produced by the compliance oversight team, is to summarize annual lessee and SPCO activities for the preceding Fiscal Year (July 1 through June 30). The reports generally provide some background information, a summary and analysis of the lessee's annual report, a summary of the current year's oversight program, and a look forward to upcoming issues related to each ROW lease. For information about this year's report, see Section IV, This Year's Compliance Oversight Activities.



The Badami Sales Oil Pipeline transports crude oil from Badami to the Endicott Pipeline and crosses 25 miles of tundra. The pipeline was built in winter without the use of permanent gravel access roads. The Badami Sales Oil Pipeline and adjacent Badami Utility Pipeline are scheduled to temporarily discontinue service during August 2007.

III. Pipelines Subject to Compliance Monitoring

Currently, excluding TAPS, there are fifteen AS 38.35 pipeline ROW leases and one AS 38.05 ROW grant subject to SPCO compliance monitoring. Thirteen of these pipelines are operational as of July 31, 2007. The Badami Utility and Milne Point Products pipelines are no longer operational, and the Nuiqsut Natural Gas Pipeline is constructed but not yet operational. The following table lists the sixteen pipelines subject to SPCO lease compliance monitoring.

<u>Location</u>	<u>ADL</u>	<u>Name (product)</u>	<u>Length in Miles*</u>	<u>ROW Lessee</u>
North Slope	415701	Alpine Oil	34	ConocoPhillips Company
North Slope	415932	Alpine Diesel	34	ConocoPhillips Company
North Slope	415857	Alpine Utility (Grant)	34	ConocoPhillips Company
North Slope	415472	Badami Sales Oil	25	BP Transportation (Alaska)
North Slope	415965	Badami Utility	31	BP Transportation (Alaska)
North Slope	410562	Endicott (Oil)	26	Endicott Pipeline Company
Southcentral	228162	Kenai Kachemak (Gas)	50	Kenai Kachemak Pipeline, LLC
North Slope	402294	Kuparuk (Oil)	28	Kuparuk Transportation Company
North Slope	409027	Kuparuk Extension (Oil)	9	Kuparuk Transportation Company
North Slope	410221	Milne Point (Oil)	10	Milne Point Pipeline, LLC
North Slope	416172	Milne Point Products	10	Milne Point Pipeline, LLC
Southcentral	69354	Nikiski Alaska (Refined petroleum products)	70	Tesoro Alaska Pipeline Company
North Slope	415700	Northstar Oil	17	BP Transportation (Alaska)
North Slope	415975	Northstar Gas	16	BP Transportation (Alaska)
North Slope	416202	Nuiqsut Natural Gas	14	North Slope Borough
North Slope	411731	Oliktok (Natural Gas Liquids)	28	Oliktok Pipeline Company

**The length values given in this table are the approximate length of the pipeline system. The length of pipeline on State-leased ROW lands may be shorter. For detailed information about State lands in a ROW, go to the chapter for that pipeline.*

IV. This Year's Compliance Oversight Activities

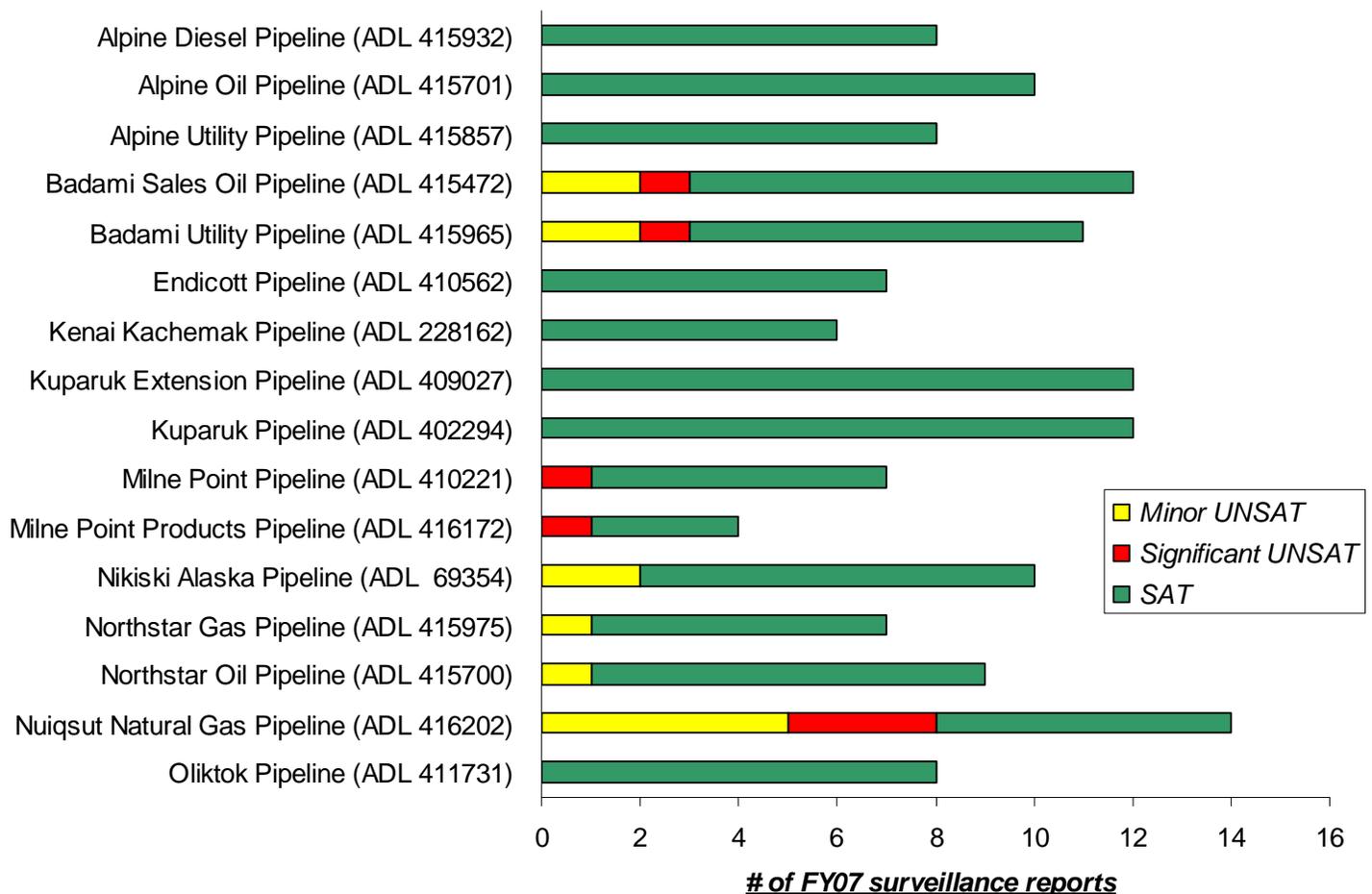
1) Compliance Monitoring

Between July 1, 2006 and June 30, 2007, the SPCO conducted field surveillance for all 15 AS 38.35 pipeline ROW leases and one utility pipeline grant to monitor various compliance issues, producing 145 surveillance reports. Data are presented both in terms of the number of field trips per fiscal year and the number of finalized surveillance

reports. In later chapters of this report, each surveillance report is listed in a table format for each pipeline including the field trip or review date, report date, lease requirement, subject, and finding. Surveillance report numbers are provided for reference.

SPCO performance for non-TAPS pipelines under the "Missions and Measures" program is presented in Appendix C. Other program performance measures are described below.

FY07 Surveillance Report Summary by ROW Lease and Pipeline



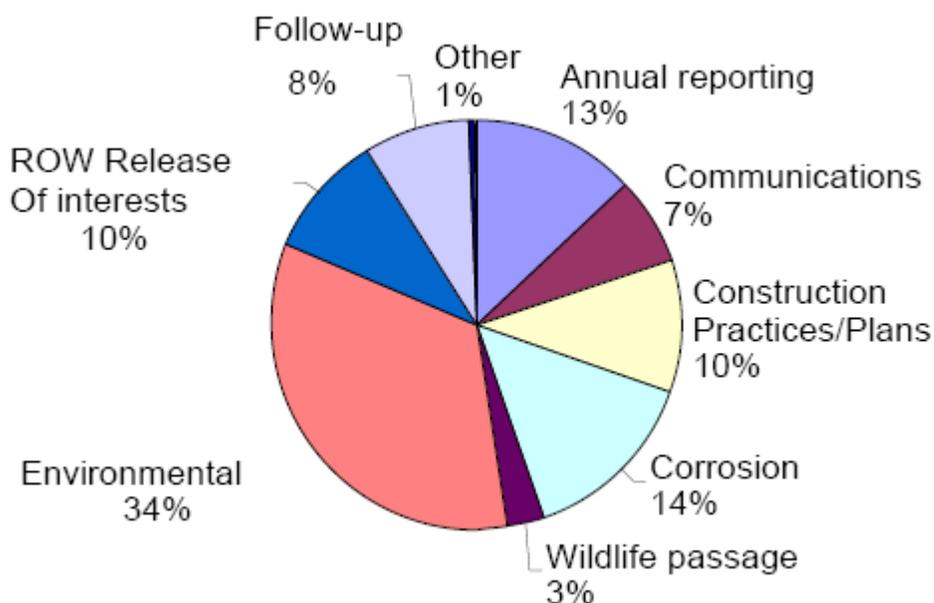
The chart above shows the number of surveillance reports that were signed during FY07 for each pipeline ROW lease subject to SPCO compliance monitoring. A surveillance report is described as "Minor UNSAT" or "Significant UNSAT" in this chart if at least one of the attributes described on that report were designated as such. Each report typically contains one to four attributes. Throughout the surveillance report summary tables in the SPCO annual report, surveillance reports are described as "UNSAT" if at least one attribute was found to be unsatisfactory. Each pipeline ROW was visited in the field at least once in FY07, though some were visited as many as four times. These field trips are described in the chapter for each pipeline.

A key focus of surveillance efforts in FY07, as prescribed by the SPC, and continued from FY06, was corrosion. The compliance oversight team reviewed numerous documents related to corrosion and attended the launch and retrieval of in-line inspection tools (smart pigs). The team followed through to document that issues identified in ILI runs were addressed in a timely manner by the lessees. When performing smart pigging surveillance, the team attends the launch and retrieval of the tool, notes pigging safety practices, reviews procedures, and requests a standard set of documents such as the Executive Summary from the tool vendor's report. Objective evidence gathered is then compared to lease requirements and the lessee's QA and surveillance and monitoring programs. In FY07, the team attended smart pig runs for the Kuparuk Pipeline and Nikiski Alaska Pipeline. Since the Nikiski Alaska Pipeline is buried, the team also attended follow-up integrity digs at locations on the Kenai Peninsula and in Anchorage. ILI information was requested and received for other AS 38.35 pipelines and evaluated by a State engineer.

Surveillance in FY07 also covered 2006 summer construction activities occurring along the Kenai Kachemak Pipeline (KKPL) on the Kenai Peninsula. Having recently finished the Happy Valley Extension to the pipeline, the lessee was granted a ROW amendment to begin construction on the 4.2-mile Kasilof Extension. Field surveillance of the KKPL in FY07 focused on observing Kasilof Extension construction.

Other important surveillance topics in FY07 included communications capability, surveillance & monitoring, quality assurance, ROW storage, public access, stream crossings, wildlife passage (for above-ground pipelines), maintenance practices, revegetation of disturbed areas, erosion control, procedure reviews, and worker and public safety. The chart below presents an approximate distribution of FY07 surveillance reports across broad categories.

FY07 Surveillance Report Subjects (145 reports total)



FY07 Surveillance Field Trip Summary

<u>When</u>	<u>ADL</u>	<u>Pipeline(s)</u>	<u>Surveillance Topics</u>	<u>Surveillant(s)</u>
July 17-20, 2006	415701	Alpine Oil Pipeline	General overview; all river, stream, and road crossings, pipelines crossing floodplains, and above- to below-ground transitions	Novinska Arnesen
	415932	Alpine Diesel Pipeline		
	415857	Alpine Utility Pipeline		
	402294	Kuparuk (Oil) Pipeline		
	409027	Kuparuk Extension Pipeline		
July 18, 2006	411731	Oliktok Pipeline	Follow-up to valve signage and tripping hazards	Arnesen
	410221	Milne Point (Oil) Pipeline		
July 28, 2006	416172	Milne Point Products Pipeline	Construction of Kasilof Extension	Arnesen
	228162	Kenai Kachemak Pipeline		
July 31-August 3, 2006	415700	Northstar Oil Pipeline	State Land review for upcoming release of interests from Construction ROW to Operations ROW width	Novinska
	415975	Northstar Gas Pipeline		
	415472	Badami Sales Oil Pipeline		
	415965	Badami Utility Pipeline		
August 19, 2006	415700	Northstar Oil Pipeline	Revegetation and erosion control at shore crossing	Arnesen
	415975	Northstar Gas Pipeline		
August 24-25, 2006	402294	Kuparuk (Oil) Pipeline	In-line inspection (smart pig), communications capability	Novinska Arnesen
September 12, 2006	228162	Kenai Kachemak Pipeline	Kasilof Extension Revegetation	Novinska
September 30- October 1, 2006	410562	Endicott (Oil) Pipeline	Hot tapping procedures for approved pipeline jumpers	Arnesen
January 22-23, 2007	69354	Nikiski Alaska Pipeline	In-line inspection	Novinska Arnesen
February 6, 2007	415701	Alpine Oil Pipeline	Communications capability	Arnesen
March 22-23, 2007	410562	Endicott (Oil) Pipeline	Communications capability, wildlife movements	Arnesen
	415965	Badami Utility Pipeline		
March 27, 2007	69354	Nikiski Alaska Pipeline	ILI follow-up (integrity digs)	Novinska Arnesen
March 30-31, 2007	416202	Nuiqsut Natural Gas Pipeline	Nechelik Channel pipeline replacement project	Arnesen
April 15, 2007	415472	Badami Sales Oil Pipeline	Badami Weir Interim Corrective Action and Data Acquisition Plan	Arnesen
	415965	Badami Utility Pipeline		
April 18, 2007	69354	Nikiski Alaska Pipeline	ILI follow-up (integrity digs)	Novinska Arnesen
May 10 & 24, 2007	410221	Milne Point (Oil) Pipeline	Attend quarterly meeting between operator and owner	Novinska Arnesen
	416172	Milne Point Products Pipeline		
May 2007	415472	Badami Sales Oil Pipeline	Badami Weir site visit during break-up	Arnesen
	415965	Badami Utility Pipeline		

2) Annual Lessees' Reports

In early 2007, the SPCO received annual reports from most lessees/grantees required to submit them. These varied in length, detail, and timeliness. All lessees received a response and report review from the compliance oversight team. Lessees' reports not meeting minimum requirements were asked to submit additional information. During FY07, the SPCO did not receive a final 2006 annual report from the North Slope Borough for the Nuiqsut Natural Gas Pipeline. A contractor for the NSB submitted a draft report in April 2007.

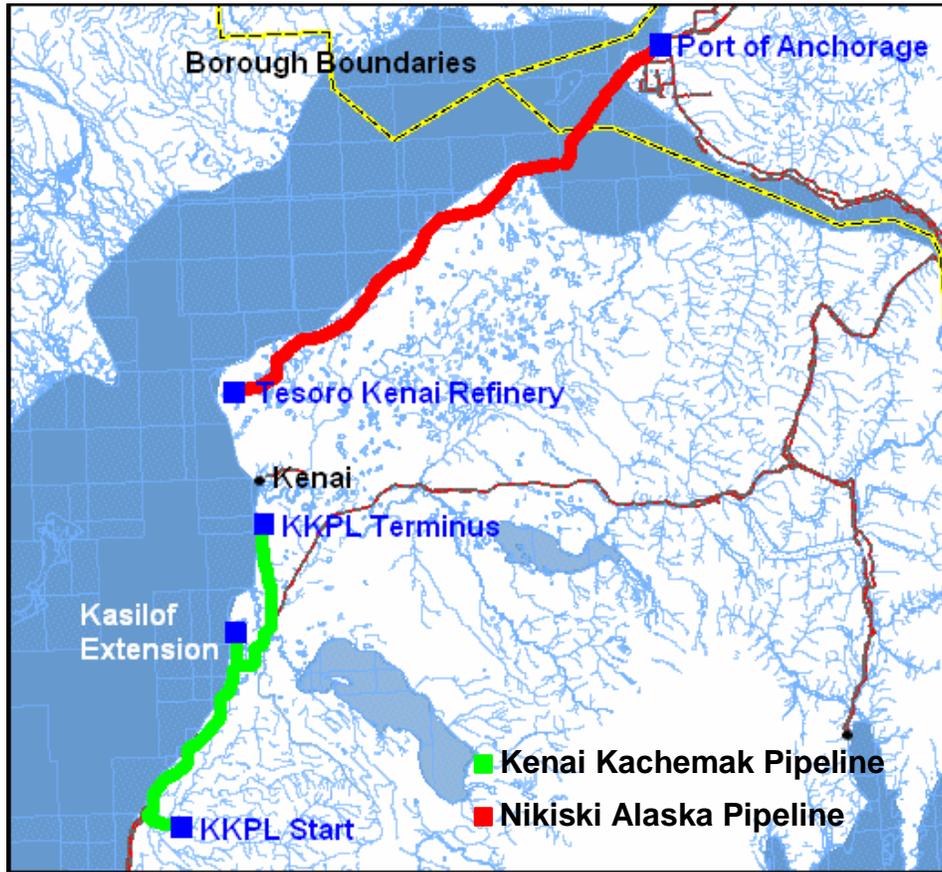
3) FY07 SPCO Lease Compliance Monitoring Report

This report is divided into three main sections: Introduction, Southcentral pipelines, and North Slope pipelines. Some pipeline leases are grouped and reported on together for convenience and to avoid repetition (for example, the two Badami pipeline leases are grouped together into Chapter 5). For more detailed information about each pipeline, see the SPCO 2006 Lease Compliance Monitoring report, available on the web at www.jpo.doi.gov/SPCO/SPCO.htm.

V. Next Year's Compliance Oversight Activities

In FY08, the compliance oversight team intends to focus surveillance efforts on each lessee's QA and Surveillance and Monitoring programs and plans. The team anticipates corrosion will continue to be an important surveillance topic through FY08. For more information on planned upcoming surveillance activities for each individual pipeline, visit the section of that chapter for Compliance Oversight.

SOUTHCENTRAL PIPELINES



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1 Kenai Kachemak Pipeline



During summer 2006, construction was ongoing for the Kasilof Extension to the Kenai-Kachemak Pipeline, a high-pressure natural gas pipeline on the Kenai Peninsula.

1.1 Right-of-Way Lease and Pipeline System Overview

<u>ADL and Lease Name</u>	<u>Lease Effective Date</u>	<u>Lease Expiration Date</u>	<u>Lessee</u>	<u>State Acreage</u>	<u>Survey Number</u>
228162 Kenai Kachemak Pipeline	November 26, 2002	November 25, 2032	Kenai Kachemak Pipeline LLC (owned by Marathon Oil Company and GUT LLC, a wholly owned subsidiary of Unocal)	227 acres, construction ROW	EPF 2004-45
<u>ROW Lease Amendments</u>	<u>Event</u>	<u>Length</u>	<u>Description</u>	<u>State Acreage</u>	<u>Survey Number</u>
June 16, 2004	Addition	6.3 miles	Happy Valley Extension (HVE)	+48 acres construction ROW	EPF 2005-41
April 24, 2006	Addition	4.2 miles	Kasilof Extension	+35.6 acres construction ROW	EPF 2007-04

The Kenai Kachemak Pipeline (KKPL) is a high-pressure natural gas transmission pipeline on Alaska's Kenai Peninsula. The KKPL begins at the Happy Valley production pad and ends at the Marathon Oil Company 500 Master Meter Building, running

generally south to north. Seven Cook Inlet production pads currently transport natural gas through the KKPL. Some natural gas is distributed from the KKPL for local use.

Currently, the pipeline ROW is in construction width (60 feet in most places) to allow the lessee to use State lands necessary for pipeline construction, totaling 294.6 acres. The ROW is wider at river crossings and horizontal directional drilling (HDD) sites. When the *ROW Release of Interest* process is completed, the operations ROW will be 20 feet wide on State land, totaling approximately 102.3 acres.

River and Stream Crossings: The KKPL was bored underneath rivers and streams using HDD and crosses the Kasilof and Ninilchik Rivers, Crooked Creek, Coal Creek, and multiple unnamed creeks, streams, and gullies.

Quality Program: The KKPL Quality Assurance Program was approved by the SPCO on November 25, 2002 and has not been amended since the original lease was issued. The lessee is responsible for complying with this program during Pipeline Activities throughout all phases of construction, operations, maintenance, and termination.

An electronic copy of the KKPL Lease Agreement is available at the SPCO website: <http://www.jpo.doi.gov/SPCO/SPCO.htm>. Additional information about the ROW Lease Agreement and pipeline system is contained in the *2006 State Pipeline Coordinator's Office Lease Compliance Monitoring Report*, also available on the SPCO website.

Since the line is buried, a cathodic protection system is installed and maintained per USDOT regulations. The pipeline is coated with an external layer of fusion-bonded epoxy to prevent soil-to-pipe contact.

<u>Pipeline System</u>	<u>Diameter</u>	<u>Wall Thickness</u>	<u>Product</u>	<u>Year Built</u>	<u>System Length</u>
KKPL Mainline & HVE	12"	0.330" and 0.500"	Natural gas	2003-2004	50 miles including Kasilof Extension (42 miles on State land)
Kasilof Extension	6"	0.280" and 0.432"	Natural gas	2006	4.2 miles (all on State land)

<u>Pipeline System</u>	<u>2006 Throughput</u>	<u>Maximum Operating Pressure</u>	<u>Maintenance Pigging</u>	<u>Last Smart Pig Run</u>	<u>Current Pipeline Operator</u>
KKPL Mainline	21.2 billion cubic feet	1,480 psig	Not routinely	2005 Baseline	NORSTAR (affiliated with Enstar Natural Gas Company)
Kasilof Extension	Aggregated with KKPL	1,480 psig	Not routinely	n/a	NORSTAR

1.2 Lessee's Annual Report

NORSTAR Pipeline Company (NORSTAR), operator of the KKPL, submitted the *Kenai Kachemak Pipeline 2006 Annual Report* on behalf of the lessee on time, dated January 31, 2007. The KKPL ROW lease Stipulation 1.13.1 requires annual reporting.

1.2.1 SPCO Review

Initial SPCO review of the KKPL annual report found it met most of the minimum requirements but was partially incomplete. The compliance team emailed a request for additional information, and NORSTAR provided a satisfactory addendum via email on May 11, 2007. The compliance team issued surveillance report 07-SPCO-S-042 documenting acceptance of the annual report.



Left: this picture of a "gauging pig" was taken prior to the pig being run through the new 6" Kasilof Extension in August 2006. The metal plates between the two yellow polyurethane discs are designed to deform if they encounter a protrusion or reduced diameter in the newly constructed pipe. This picture was taken by an SPCO surveillant in July 2006 prior to the gauging pig run and system hydrotest the following month.

1.2.2 Lessee's Activities

Below is some information presented in the lessee's 2006 report:

Production: After construction of the Kasilof Extension was completed, the Kasilof South Pad came on-line November 1, 2006, and the State Pad came on-line December 18, 2006, bringing the total number of producing pads feeding the KKPL to seven.

Operations: The operating and maintenance agreement between KKPL and NORSTAR has been extended through September 30, 2007. In 2006 NORSTAR performed line locates, leak surveys, pipeline patrols, and routine maintenance as part of day-to-day operations.

Safety: NORSTAR reports that no lost time incidents or recordable events occurred during 2006. Effective December 2006, NORSTAR has instituted a Safe Work Permit procedure for non-routine work.

Restoration of Disturbed Areas: Revegetation has been completed for the Happy Valley Extension, and seeding was completed for the Kasilof Extension. Re-germination had commenced by late fall 2006. For more info, see 1.3.2, Compliance Oversight.

Integrity Management Program (IMP): The KKPL IMP, required by USDOT regulations, has been incorporated into the IMP for Alaska Pipeline Company, a sister company to NORSTAR operating transmission lines for ENSTAR Natural Gas

Company. Seven High Consequence Areas totaling approximately 1.26 miles of pipeline were identified during a review conducted in 2006.

Hazardous Substances Discharges: NORSTAR reports there were no known discharges of oil or other hazardous substances to the ROW during 2006.

1.2.3 Lessee's Surveillance & Monitoring

The KKPL Surveillance & Monitoring Program, approved by the SPC August 27, 2003, requires the pipeline operator to monitor conditions that could impact pipeline integrity, public health and safety, and the environment. The lessee is required to implement the program during pipeline operations and maintenance.

Line Locates: Because the KKPL passes through populated areas, the lessee participates in the *OneCall* damage prevention program. During 2006, NORSTAR reported receiving 505 locate requests from the centralized call center, resulting in 192 onsite locates and 19 high pressure standbys (digging within ten feet of the pipeline). Locate requests peaked in June and were common throughout the summer construction season. No known third party damage incidents occurred in 2006.

Internal Corrosion Monitoring: NORSTAR reports regularly sampling gas for quality and taking dew points at the pads and terminus to monitor water content in the pipeline. These data were submitted to the SPCO in the annual report.

USDOT Maintenance: Per USDOT, the lessee inspects rectifiers a minimum of six times per year at regular intervals. Pipe to soil and coupon current readings are taken periodically at four locations along the KKPL and every mile of the Kasilof Extension. The USDOT-required Pipe to Soil Survey was completed in October 2006. Valves were cycled and lubricated on August 22, 2006. Personnel conducted USDOT leak surveys in January and July, 2006, finding no leaks.

Aerial Surveillance: 28 aerial patrols of the KKPL were conducted in 2006. During these flights and drive-by inspections, personnel check pipeline and ROW conditions to look for encroachments, construction activities, or other changes in the ROW.

1.3 SPCO Activities

1.3.1 Lease Administration

On July 31, 2006, the SPCO issued a letter of non-objection to KKPL for a change in re-seeding methods for the Kasilof Extension revegetation efforts (letter 06-207-WW).

1.3.2 Compliance Oversight

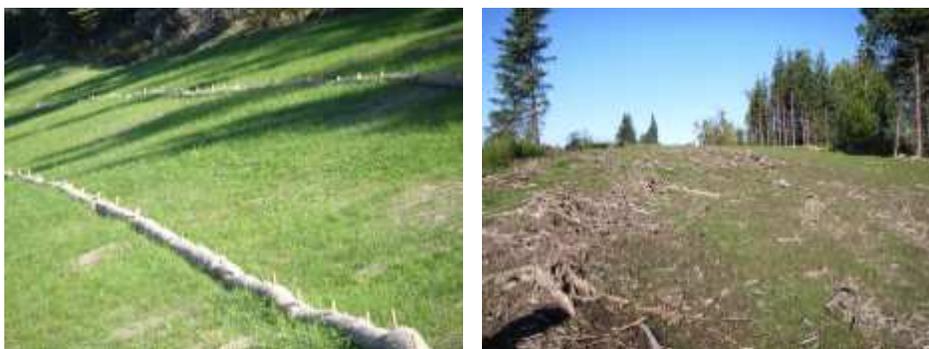
During FY07, the compliance oversight team conducted two field surveillances of the KKPL ROW to observe activities related to construction of the Kasilof Extension. Six surveillance reports were signed during FY07 related to the two field trips and to SPCO

review of the lessee's annual report. Please note that some surveillance reports were submitted under an older numbering system.

1.3.3 Summary of FY07 Field Surveillance

July 28, 2006: An SPCO surveillant visited the Kasilof Extension ROW to observe construction in progress. The surveillant reported satisfactory implementation of the Construction Execution Plan and satisfactory efforts to minimize surface disturbance and stabilize disturbed areas (letter 06-211-WW). Pictures of weld coatings were forwarded to USDOT via email.

September 12, 2006: An SPCO surveillant and two Lease Administration team members drove the entire KKPL ROW to review ROW conditions. Construction for the Kasilof Extension had already been completed and site restoration was reviewed. All conditions were reported as satisfactory (letter 06-297-WW).



SPCO surveillance on September 12, 2006 evaluated revegetation efforts along the Kasilof Extension. Construction was completed during summer 2006 and by September, revegetation was well under way. The route will be re-visited in FY08.

1.3.4 Summary of SPCO Surveillance Reports Signed in FY07

<u>Field Trip Date</u>	<u>Date Signed</u>	<u>Stipulation</u>	<u>Description</u>	<u>Report #</u>	<u>Finding</u>
7/28/2006	8/8/2006	1.3.1	Construction plan	ANC-06-S-164	SAT
7/28/2006	8/8/2006	2.2.2.1	Minimize surface disturbance	ANC-06-S-165	SAT
7/28/2006	8/8/2006	2.7.1, 2.7.2	Stabilize, revegetate disturbed areas	ANC-06-S-166	SAT
9/12/2006	11/6/2006	1.11.1, 1.11.2	Regulation of public access	06-SPCO-S-057	SAT
9/12/2006	11/6/2006	2.7.1, 2.7.2, 2.7.3	Stabilize, revegetate, & restore disturbed areas	06-SPCO-S-058	SAT
n/a	5/17/2006	1.13.1	Annual reporting	07-SPCO-S-042	SAT

1.3.5 Appraisals

<u>Kenai-Kachemak Pipeline</u>	<u>ADL #</u>	<u>State Acres</u>	<u>Rental</u>	<u>Next Appraisal Due</u>
Gas Pipeline Construction ROW	228162	294.6	\$47,350	11/26/2007

1.4 Upcoming Issues

1.4.1 Lessee's Activities

During 2007, NORSTAR plans to conduct an independent audit to review KKPL operations with regard to the terms of the ROW Lease and USDOT regulations. They plan to review and/or implement audit recommendations in late 2007.

1.4.2 SPCO Activities

The Lease Administration team will continue to follow-up with KKPL on draft as-built surveys. A survey for the Kasilof Extension is expected to be submitted in FY08. The compliance oversight team plans to conduct field surveillance of the KKPL during FY08. Meetings with KKPL to address Quality Assurance have been scheduled for July and August 2007. The lessee's 2007 annual report, due January 31, 2008, will be reviewed.

1.5 Lease-Required Contact Information

The KKPL ROW lease requires the lessee to designate in writing a registered agent, authorized representative, and field representative. KKPL updated these contacts on September 26, 2006. The KKPL President is both the registered agent and authorized representative for the company.

Registered Agent*Required by Lease Section 8(j)*A. Ben Schoffmann, President
Kenai Kachemak Pipeline, LLC**Authorized Representative***Required by Lease Section 30*P.O. Box 196168
Anchorage, AK 99519-6168**Field Representative***Required by Lease Section 30*Steve Robinson
NORSTAR Pipeline Company
P.O. Box 526
Sterling, AK 99672

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2 Nikiski Alaska Pipeline



The Nikiski Alaska Pipeline transports refined petroleum products (jet fuel, diesel, gasoline, etc.) from the Tesoro Kenai Refinery to the Port of the Anchorage. The 70-mile pipeline is buried, and crosses Turnagain Arm from Point Possession to Point Campbell. Each of nine mainline valves are aboveground and fenced, such as the above remotely-controlled valve.

2.1 Right-of-Way Lease and Pipeline System Overview

<u>ADL and Lease Name</u>	<u>Lease Effective Date</u>	<u>Lease Expiration Date</u>	<u>Lessee</u>	<u>State Acreage</u>	<u>Survey Number</u>
69354 Nikiski Alaska Pipeline	January 30, 1976	January 29, 2031	Tesoro Alaska Pipeline Company	64 acres operations ROW	ASLS 76-215
<u>ROW Lease Amendments</u>	<u>Event</u>	<u>Length</u>	<u>Event</u>	<u>State Acreage</u>	<u>Survey Number</u>
September 21, 1984	Name change	n/a	Lessee converted to Tesoro Alaska Pipeline Company	n/a	n/a
July 28, 2004	Expiration date change	n/a	Expiration date changed to January 29, 2031 in Sec. 2(a)	n/a	n/a
May 19, 2005	Reroute	2,000 feet	Sub-sea pipe replacement	+9.2 acres construction ROW	EPF 2006-01

The Nikiski Alaska Pipeline transports refined petroleum products from Tesoro's Kenai Refinery to the Port of Anchorage. This pipeline is referred to by the lessee as the Tesoro Alaska Pipeline (TAPL). The TAPL begins at the Tesoro Kenai Refinery in

Nikiski where the mainline pumps, metering, and pig launcher are located. It travels along the Kenai Spur Highway through the Captain Cook State Recreation Area, and then parallels the coast to Point Possession before crossing Turnagain Arm. The pipeline travels along the Tony Knowles Coastal Trail, through the airport, and along Northern Lights Boulevard. It travels close to the railroad ROW to the Port.

The pipeline ROW is typically 10 feet wide for operations and maintenance.

Stream Crossings: The TAPL was trenched at all crossings including anadromous streams: Bishop, Swanson, Otter, Seven Egg, Miller, Fish, Chester, and Ship.

Since the line is buried, a cathodic protection system is installed and maintained per USDOT regulations. The pipeline is externally coated to prevent soil-to-pipe contact. Tesoro participates in the *OneCall* damage prevention program through the Locate Call Center of Alaska. Notifications of excavation work being performed near the pipeline are sent to Tesoro for evaluation.

An electronic copy of the Lease Agreement is available for public viewing at the SPCO website: <http://www.jpo.doi.gov/SPCO/SPCO.htm>. Additional information is contained in the *2006 State Pipeline Coordinator's Office Lease Compliance Monitoring Report*, available on the SPCO website.

<u>Pipeline System</u>	<u>Diameter</u>	<u>Wall Thickness</u>	<u>Product</u>	<u>Year Built</u>	<u>System Length</u>
TAPL	10.75"	0.188" to 0.625"	Jet fuel, gasoline, diesel	1976	68.9 miles (52.8 miles on State land)

<u>Pipeline System</u>	<u>2006 Throughput</u>	<u>Maximum Operating Pressure</u>	<u>Maintenance Pigging</u>	<u>Last Smart Pig Run</u>	<u>Current Pipeline Operator</u>
TAPL	13,129,229 barrels	1,440 psig	Not routinely	2007	Tesoro

2.2 Lessee’s Annual Report

Tesoro submitted the *2006 Annual Comprehensive Report on Pipeline Activities and State of the Pipeline System* on time by January 31, 2007.

2.2.1 SPCO Review

The compliance oversight team reviewed Tesoro's annual report and accepted it (letter 07-048-WW). Several documents were requested in response, including the 2006 Side Scan Sonar Survey. These were provided in a timely manner.

2.2.2 Lessee's Activities

Below is some information presented in the lessee's 2006 report:

Third-Party Damage Incident: On August 8, 2006, the pipeline was damaged approximately five miles north of the Refinery when a landowner failed to make the required *OneCall* notification. The pipeline was re-excavated, sleeved, and re-coated. As part of the damage prevention program, Tesoro mailed informational brochures to all residences within 660 feet of the pipeline in February 2007.

Pipeline Relocation: In September 2006, a 750-foot section of pipe was bored underneath Chester Creek using HDD. This pipeline relocation was required for a stream restoration project and occurred on non-state land. The SPCO submitted comments to the U.S. Army Corps of Engineers on this project (letter 06-190-WW).

Valves Rebuilt: in March 2006, seven MLVs were rebuilt in place. MLVs 7 and 8 were rebuilt recently and therefore were not rebuilt in this project.

Pipeline Hydraulic Study: Tesoro performed a pipeline hydraulic study in 2006 to determine the effects of abnormal operating conditions. Based on this study, the set points for the high-pressure alarm and high-pressure pump shutdown are now 1,350 psig and 1,370 psig, respectively. These systems are designed to ensure that the maximum operating pressure of 1,440 psig is not exceeded.

Hazardous Substances Discharges: Tesoro reports there were no known discharges of oil or other hazardous substances to the ROW during calendar year 2006.

2.2.3 Lessee's Surveillance & Monitoring

USDOT Maintenance: Per USDOT, Tesoro inspects rectifiers a minimum of six times per year at regular intervals. The USDOT-required Pipe to Soil Survey was completed in July 2006. Close-interval interference testing was performed near Moose Point. Additional magnesium anodes were installed at MLVs 2 and 3 to improve cathodic protection. At MLV 9, a new rectifier and ground bed were installed.

Side-Scan Sonar Survey: On May 17, 2006, Terrasond completed multibeam and side-scan sonar surveys on a portion of the Turnagain Arm sub-sea pipeline. Previously-identified features were located, including two rocks six feet from the pipeline, a collet grip from the 2005 pipeline repair, one 30-foot span across a rock outcropping, and fourteen anode sleds. Tesoro stated that these features do not pose an immediate threat to the pipeline.

2.3 SPCO Activities

2.3.1 Lease Administration

The as-built survey for the 2005 Point Possession pipeline replacement is under review by ADNR and Tesoro has not submitted corrections required for the survey to be accepted. The ADNR Survey Section requested the corrections on January 17, 2006. The SPCO sent letter 07-017-WW via certified mail on March 8, 2007 to remind Tesoro that the amendment cannot be finalized until corrected surveys are approved.

2.3.2 Compliance Oversight

During FY07, the compliance oversight team conducted three field surveillances of the TAPL ROW to observe an in-line inspection and subsequent integrity digs. Ten surveillance reports, including five from a trip which occurred June 19-20, 2006, were signed during FY07. For information on the 2006 trip, please see last year's SPCO report. Please note that some reports were issued under a different numbering system.

October 12, 2006: The compliance team requested wall thickness information for the TAPL on June 28, 2006. This was not received, so it was again requested as part of a surveillance report, ANC-06-S-116. When Tesoro did not meet the deadline to provide pipeline wall thickness information by the due date specified in ANC-06-S-116, a significant unsatisfactory report was signed under Lease Section 6 and letter 06-290-WW was sent with a third request for information with a deadline of October 31, 2006. Wall thickness information was provided via email.

2.3.3 Summary of FY07 Field Surveillance

January 22-23, 2007: On January 22 and 23, the compliance team was present for the launch and retrieval, respectively, of an in-line inspection tool. Surveillance reports 07-SPCO-S-001 and 002 described satisfactory conditions (letter 07-020-WW). As required follow-up the compliance team asked Tesoro for documents the team routinely requests related to ILI surveillances. As of July 31, 2007, the documents have not been received. The team also asked that timely notification be provided, prior to Tesoro beginning integrity dig work in the ROW for field verification of the pig data.

March 22, 2007: On March 19, the compliance team was notified the ILI tool had identified anomalies requiring immediate attention per the pipeline's USDOT integrity management plan. Contractors had been mobilized to the site on March 9 and had completed three out of four "immediate" digs by the time the compliance team was notified. The team traveled to the Kenai Peninsula on short notice to observe the integrity dig work. Lease stipulation 1.16.1 (2) requires the SPCO to be notified immediately of any condition, problem, malfunction, or other occurrence which in any way threatens the integrity of the pipeline. Because this notification was not received, 07-SPCO-S-037 describes an unsatisfactory condition (letter 07-053-WW). During the surveillance, the team witnessed sandblasting, grinding, ultrasonic inspection, and fit-up and welding of a pressure-containing sleeve.

March 21, 2007 ROW Diesel Spill: During surveillance of integrity digs, the compliance team visited the site of a diesel-like substance spill on the ROW, located on top of a recently backfilled integrity dig site near Otter Creek, an anadromous stream. The plowed ROW was being used by the public and other industrial operations at the time. ADEC investigated and traced the spill to Moose Point #1 pad nearby, which is operated by Jim White. A contractor to Mr. White admitted causing the spill. According to ADEC, Tesoro cleaned up most of the contaminated soil in the ROW, even though they did not cause the spill, which was given spill number 07239908001.

April 18, 2007: Tesoro selected two integrity digs sites on airport property in Anchorage. The compliance team and a member of the lease administration team

visited the worksite in Turnagain Bog. Tesoro had taken great care to prevent surface disturbance, mobilizing equipment on matting to prevent wetland damage. A straw bale settling pond was built on-site for de-watering, and trench supports with vertical walls minimized the excavation footprint. During mobilization, a small amount of petroleum contamination had washed off of the mats. This left a thin sheen on the ROW, which was reported to ADEC. The total quantity of oil released was minor and Tesoro's contractors were well-prepared with spill response equipment. They committed to watching carefully for additional sheens and using absorbent pads to recover as much as possible during demobilization. ADEC took responsibility for follow-up on the sheen. Follow-up required for the ILI-related surveillances has still not been received from Tesoro and is now past due (letter 07-053-WW).

2.3.4 Summary of SPCO Surveillance Reports Signed in FY07

<u>Field Trip Date</u>	<u>Date Signed</u>	<u>Stipulation</u>	<u>Description</u>	<u>Report #</u>	<u>Finding</u>
6/20/2006	8/31/2006	Section 6	State's access to property and records	ANC-06-S-116	SAT
6/20/2006	8/31/2006	1.11	Protection of improvements	ANC-06-S-117	SAT
6/20/2006	8/31/2006	1.12	Regulation of public access	ANC-06-S-118	SAT
6/20/2006	8/31/2006	2.3.2.4	Removal of clearing debris	ANC-06-S-119	SAT
6/20/2006	8/31/2006	3.6.1	Minimize environmental changes	ANC-06-S-120	SAT
n/a	10/12/2006	Section 6	State's access to property and records	06-SPCO-S-035	UNSAT
1/22/2007	2/13/2007	1.16.1	Conduct of operations	07-SPCO-S-001	SAT
1/22/2007	2/13/2007	3.7.1	Early detection of corrosion	07-SPCO-S-002	SAT
3/21/2007	5/1/2007	1.12.1	Regulation of public access	07-SPCO-S-036	SAT
4/18/2007	5/1/2007	1.16.1	Conduct of operations; immediate notification	07-SPCO-S-037	UNSAT



Above left: A contractor grinds in preparation for ultrasonic inspection work on the TAPL during a March 2007 integrity dig. **Above right:** after blasting and grinding, the bare metal pipe is visible at a girth weld. A pressure-containing sleeve was welded onto this location.

2.3.5 Appraisals

<u>Nikiski Alaska Pipeline</u>	<u>ADL #</u>	<u>State Acres</u>	<u>Rental</u>	<u>Next Appraisal Due</u>
Pipeline Operations ROW	69354	64.021	\$15,207	To be determined

2.4 Upcoming Issues

2.4.1 Lessee's Activities

During 2007, Tesoro plans to continue with USDOT-required maintenance.

2.4.2 SPCO Activities

The lease compliance oversight team plans to conduct field surveillance of the TAPL to include an office visit, records review, annual report review, and field components to evaluate implementation of the QA Program.

2.5 Lease-Required Contact Information

The TAPL ROW lease requires the lessee to designate a registered agent and field representative. The lease and AS 38.35 require the agent to be an Alaska resident. Stipulation 1.4.2 additionally requires the agent to maintain an Anchorage office. SPCO letter 06-092-WW (July 7, 2006) asked Tesoro for updated contact information by August 15. No response was received, so the SPCO sent certified letter 07-045-WW on March 27, 2007. On April 19 Tesoro responded, again designating an agent who does not meet lease and statutory requirements for Alaska residency. The SPCO will follow up with additional correspondence in an attempt to resolve this matter.

Registered Agent

Required by Lease Section 11 and Stipulation 1.4.2

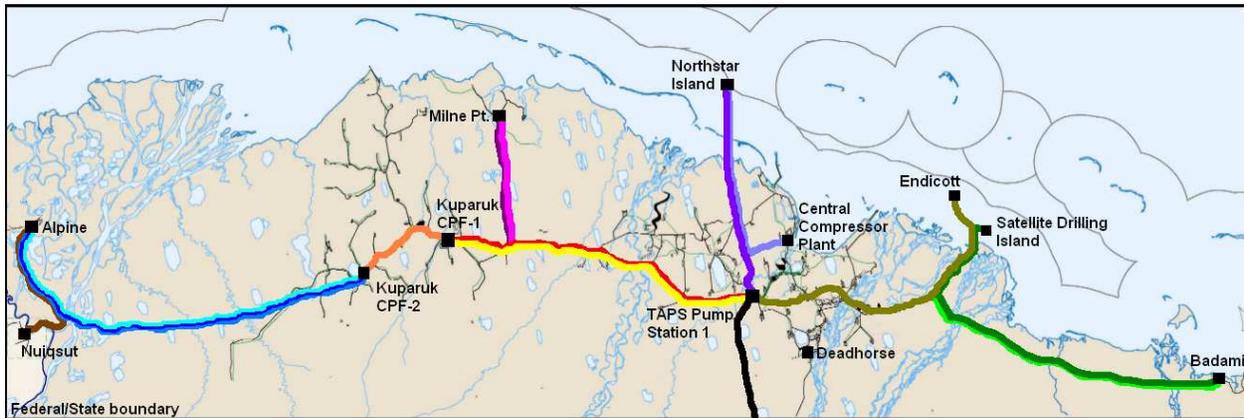
Jay R. Fraley, Manager, Right of Way & Land
 Tesoro Alaska Pipeline Company
 300 Concord Plaza Drive
 San Antonio, Texas 78216

Field Representative

Required by Lease Section 30

Shawn Brown, Manager, Alaska Pipelines & Terminals
 Tesoro Alaska Pipeline Company
 P.O. Box 3369
 Kenai, AK 99611

NORTH SLOPE PIPELINES



- Alpine Oil Pipeline*
 - Alpine Diesel Pipeline
 - Alpine Utility Pipeline
 - Badami Sales Oil Pipeline*
 - Badami Utility Pipeline
 - Endicott Pipeline*
 - Kuparuk Oil Pipeline*
 - Kuparuk Pipeline Extension*
 - Milne Point Oil Pipeline*
 - Milne Point Products Pipeline
 - Northstar Oil Pipeline*
 - Northstar Gas Pipeline
 - Nuiqsut Natural Gas Pipeline
 - Oliktok Pipeline
 - Trans-Alaska Pipeline System*
- *AS 38.35 crude oil pipeline leases

NORTH SLOPE PIPELINES 29

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3 Alpine Pipelines



The Alpine Pipelines connect the North Slope's westernmost development, Alpine, to infrastructure in the Kuparuk River Unit.

3.1 Right-of-Way Lease and Pipeline System Overview

<u>ADL and Lease Name</u>	<u>Lease Effective Date</u>	<u>Lease Expiration Date</u>	<u>Lessee/Grantee</u>	<u>State Acreage</u>	<u>Survey Number</u>
415701 Alpine Oil Pipeline	December 15, 1998	December 14, 2018	ConocoPhillips Company (CPC)	148.66 acres operations ROW	EPF 2002-40
415932 Alpine Diesel Pipeline	December 15, 1998	December 14, 2018	CPC	128.51 acres operations ROW	EPF 2002-40
415857* Alpine Utility Pipeline	January 6, 1999	January 5, 2019	CPC*	148.65 acres operations ROW	EPF 2002-40

*ADL 415857 is a ROW grant under AS 38.05 for the Alpine Utility Pipeline. CPC is the grantee.

The Alpine pipelines connect the North Slope's westernmost development, Alpine, to infrastructure in the Kuparuk River Unit. The Alpine Oil Pipeline transports processed crude oil from Alpine to the Kuparuk Pipeline Extension. The Alpine Diesel Pipeline transports heating fuel and other petroleum products back to Alpine. The Alpine Utility Pipeline transports treated seawater from Kuparuk to Alpine for use in enhanced oil recovery. Though the Alpine pipelines share horizontal and vertical supports, they each have a ROW lease agreement with ADNR. Each ROW is typically 50 feet wide.

River and Stream Crossings: The pipelines cross the Colville River using horizontal directional drilling (HDD). Above-grade crossings include the Kachemach and Miluveach Rivers and Kalubik Creek as well as several unnamed drainages.

Quality Program: The SPC approved the Alpine Pipelines QA Program on October 3, 2006 (letter 06-266-WW). CPC must comply with the program throughout all phases of construction, operations, maintenance, and termination.

An electronic copy of the leases and grant is available at the SPCO website: <http://www.jpo.doi.gov/SPCO/SPCO.htm>. Additional information about the ROW Lease Agreement is contained in last year's SPCO annual report.

<u>Pipeline System</u>	<u>Product</u>	<u>Diameter</u>	<u>Wall Thickness</u>	<u>Year Built</u>	<u>System Length</u>
Alpine Oil Pipeline	Sales-quality crude oil	14"	0.312" - 0.438"	1998-1999	34.2 miles (23.7 miles on State land)
Alpine Diesel Pipeline	Arctic heating fuel (AHF); other products	2.375"	0.156"	1998-1999	34.2 miles (23.7 miles on State land)
Alpine Utility Pipeline	Treated seawater	12.75"	0.330"	1998-1999	34.2 miles (23.7 miles on State land)

<u>Pipeline System</u>	<u>2006 Throughput</u>	<u>Max. Oper. Pressure</u>	<u>Maintenance Pigging</u>	<u>Last Smart Pig Run</u>	<u>Current Pipeline Operator</u>
Alpine Oil Pipeline	44,268,858 net barrels	2,064 psig at 180°F	Monthly	2005	ConocoPhillips Alaska, Inc (CPAI)
Alpine Diesel Pipeline	5,229,339 gallons AHF; 2,983 barrels LVT 200 Base Oil	1,366 psig at 100°F	Quarterly	n/a (hydrotest instead)	CPAI
Alpine Utility Pipeline	77,470,593 barrels	2,160 psig at 150°F	Every 3 weeks	2005	CPAI

3.2 Lessee's Annual Report

CPAI, operator of the Alpine pipelines, submitted three separate *Annual Comprehensive Report on Pipeline Activities* binders on behalf of CPC on time in early 2007. Annual reporting is a requirement of Stipulation 1.14.1 of the Alpine leases/grant.

3.2.1 SPCO Review

SPCO review of the Alpine annual reports found them "well organized, thorough, and presented in good detail" (letter 07-031-WW). The high level of detail in these reports was especially helpful to the compliance team for setting surveillance priorities for calendar year 2007 and no follow-up was required.

3.2.2 Lessee's Activities

Below is some information presented in the lessee's 2006 report:

Operations: The Alpine Oil Pipeline hit a new daily throughput record of 140,581 barrels on December 4, 2006. The oil and seawater pipelines were 99.9% reliable in 2006. The oil pipeline had four planned and three unplanned shutdowns/slowdowns, and the seawater line had one unplanned shutdown. The diesel pipeline had no shutdowns or slowdowns. Two batches of mineral oil (2,070 and 913 barrels) were shipped through the diesel pipeline in addition to heating fuel.

Internal Audits: In 2006, CPAI followed up on action items identified in a 2005 audit. CPC conducted a corporate HSE compliance audit for the Kuparuk River Unit.

Integrity Management Plan (IMP): The USDOT conducted an integrity management inspection of CPAI's North Slope pipelines November 14-16, 2006.

Safety: Alpine's Process Safety Management Employee Participation Plan and Roadmap was updated October 4, 2006. The program provides for pro-active employee participation to improve worker safety, mostly through observation. In 2006, Alpine personnel generated 1,204 observations, of which 44 were classified as "audits, near misses, or hazard IDs". There were no "lost time" or other OSHA reportable accidents.

Pipeline Seep: As mentioned in last year's SPCO annual report, a seep was reported from an Alpine Oil Pipeline weld pack December 19, 2005. CPC reports the area was repaired with a sleeve. In the incident analysis, CPAI reviewed records for 70 similar welds. Six welds were chosen for field inspection with wet fluorescence magnetic particle and ultrasonic testing. No leak paths were identified on these welds, and CPAI concluded that it is unlikely any undiscovered leak paths exist along the Alpine Oil Pipeline. As a preventive measure, CPAI developed a shear wave ultrasonic inspection protocol for critical welds during pipeline construction, in addition to radiography.

Oil and Hazardous Substances Discharges: Less than one gallon of diesel was spilled from a Tioga heater and cleaned up at the seep location on January 4, 2006.

Emergency Preparedness Drill: On January 26, 2006, a drill was conducted on the Alpine and Kuparuk pipelines for response to a TAPS outage of one to three weeks. Pipeline shutdown, start-up, and product storage was reviewed.

Release of Interests: In calendar year 2006, the *ROW Release of Interests Process* was completed for the Alpine Pipelines, reducing the ROW Construction width to Operations width. Details can be found in the SPCO 2006 Lease Compliance Monitoring Report.

3.2.3 Lessee's Surveillance & Monitoring

The Alpine Pipelines Surveillance & Monitoring Program, approved by the SPC July 29, 2005 (letter 05-156-WW), requires the pipeline operator to monitor conditions that could impact pipeline integrity, public health and safety, and the environment. The lessee is required to implement the program during pipeline operations and maintenance. In their *2006 Annual Comprehensive Report on Pipeline Activities*, CPC

provided a detailed matrix of surveillance and monitoring tasks including work order numbers, frequencies, and completion dates. This information is too detailed to duplicate here, but is located in the case file.

Aerial Surveillance: In 2006, 171 aerial visual inspections were performed on the Alpine pipelines. Of these, 47 utilized forward-looking infrared (FLIR) technology.

Maintenance Pigging: In 2006, the oil, diesel, and seawater pipelines were cleaned with maintenance pigs twelve, four, and sixteen times, respectively.

River and Stream Crossings: A 2006 survey of ROW river and stream crossings concluded that VSMs and pipelines are stable. Expected natural erosion continues to occur within design limits. Annual monitoring will continue at the Colville River HDD sties. Other crossings appear more stable and monitoring frequency may decrease.

3.3 SPCO Activities

3.3.1 Lease Administration

The lease administration team reviewed a request to transfer interests in the Alpine Oil Pipeline ROW lease from CPC to Alpine Transportation Company and will coordinate the review effort with legal counsel.

3.3.2 Compliance Oversight

During FY07, the compliance oversight team conducted three field surveillances of the Alpine pipelines. During FY07, 26 surveillance reports were signed related to the three field trips, SPCO review of the lessee's annual report, and follow-up on prior unsatisfactory reports. Ten reports were for the oil pipeline, and eight each for the diesel and utility pipelines. Please note that some surveillance reports were issued under a different numbering system.

July 26, 2006: An in-house surveillance was completed to bring closure to unsatisfactory findings from June 2005 surveillance. For details, please see the 2006 Lease Compliance Monitoring Report. Surveillance reports ANC-06-S-132 through 138 document the issues from the June 2005 surveillance have been resolved (letter 06-199-WW).

Alpine Diesel Pipeline Integrity Issue: On April 11, 2007, the Alpine Diesel Pipeline came off of a horizontal support member when a corroded u-bolt failed. No product was spilled, though the pipeline was shut down as a precautionary measure. The SPCO was not notified directly of this integrity issue, a requirement of the approved surveillance and monitoring program. Letter 07-054-WW was sent requesting additional information related to the incident. The requested information was received on time and is currently under review by the compliance team and a State engineer.

3.3.3 Summary of FY07 Field Surveillance

July 19, 2006: The compliance oversight team flew the entire route of the Alpine pipelines, evaluating general ROW conditions and erosion control at all river and stream crossings. The team evaluated bank erosion and stabilization, sedimentation, and revegetation. A maintenance pig was run through the Alpine Utility Pipeline on that day and it was audible passing by the West Bank of the Colville River crossing. All conditions were reported as satisfactory (letter 06-272-WW).

February 6, 2007: The SPCO was invited to attend a 5-year leak detection system function test for the Alpine Oil Pipeline. A team member witnessed the simulated leak at the lessee's offices in Anchorage via the communications system (letter 07-011-WW).



The Alpine pipelines demonstrated the North Slope's first pipeline river crossing using horizontal directional drilling (HDD). The pipelines are installed inside steel casing that was bored underneath the riverbed, 85 feet below grade. In the above photo, thermosiphons are visible above the Utility Pipeline (left) and Oil Pipeline (middle). Also known as "heat pipes," these help keep the permafrost frozen. The Diesel Pipeline transitions to below-ground on a smaller gravel pad to the right of the main pad. This picture was taken from the air on the east side of the river, facing west. HDD crossings are not as susceptible to erosion as trenched crossings. This particular location is within the Colville River floodplain. A trenched crossing would be at risk for erosion during floods, as has happened at the Badami Pipelines' crossing of the East Channel of the Sagavanirktok River (see Chapter 5). A channel similar to the one which eroded across the trench backfill at the Badami crossing is visible in the above photo on the right.

3.3.4 Summary of SPCO Surveillance Reports Signed in Fiscal Year 2007

<u>ROW</u>	<u>Field Trip Date</u>	<u>Date Signed</u>	<u>Stipulation</u>	<u>Description</u>	<u>Report #</u>	<u>Finding</u>
Oil	6/27/2005	7/26/2006	Section 20	Furnishing requested information	ANC-06-S-132	SAT
Oil	6/27/2005	7/26/2006	1.7.2	VSM reflectors	ANC-06-S-133	SAT
Oil	6/27/2005	7/26/2006	1.13.1	Storage on approval	ANC-06-S-134	SAT
Diesel	6/27/2005	7/26/2006	1.7.2	VSM reflectors	ANC-06-S-135	SAT
Diesel	6/27/2005	7/26/2006	1.13.1	Storage on approval	ANC-06-S-136	SAT
Utility	6/27/2005	7/26/2006	1.7.2	VSM reflectors	ANC-06-S-137	SAT
Utility	6/27/2005	7/26/2006	1.13.1	Storage on approval	ANC-06-S-138	SAT
Oil	7/19/2006	9/25/2006	1.6.1	Surveillance and monitoring	06-SPCO-S-003	SAT
Oil	7/19/2006	9/25/2006	1.7.2	VSM reflector	06-SPCO-S-004	SAT
Oil	7/19/2006	9/25/2006	1.13.1	Storage on approval	06-SPCO-S-005	SAT
Oil	7/19/2006	9/25/2006	2.3	Erosion control	06-SPCO-S-006	SAT
Oil	7/19/2006	9/25/2006	2.10	Revegetation	06-SPCO-S-007	SAT
Diesel	7/19/2006	9/25/2006	1.6.1	Surveillance and monitoring	06-SPCO-S-008	SAT
Diesel	7/19/2006	9/25/2006	1.7.2	VSM reflector	06-SPCO-S-009	SAT
Diesel	7/19/2006	9/25/2006	1.13.1	Storage on approval	06-SPCO-S-010	SAT
Diesel	7/19/2006	9/25/2006	2.3	Erosion control	06-SPCO-S-011	SAT
Diesel	7/19/2006	9/25/2006	2.10	Revegetation	06-SPCO-S-012	SAT
Utility	7/19/2006	9/25/2006	1.6.1	Surveillance and monitoring	06-SPCO-S-013	SAT
Utility	7/19/2006	9/25/2006	1.7.2	VSM reflector	06-SPCO-S-014	SAT
Utility	7/19/2006	9/25/2006	1.13.1	Storage on approval	06-SPCO-S-015	SAT
Utility	7/19/2006	9/25/2006	2.3	Erosion control	06-SPCO-S-016	SAT
Utility	7/19/2006	9/25/2006	2.10	Revegetation	06-SPCO-S-017	SAT
Oil	2/6/2007	2/7/2007	1.2	Communications	07-SPCO-S-003	SAT
Oil	n/a	3/20/2007	1.14.1	Annual reporting	07-SPCO-S-004	SAT
Diesel	n/a	3/20/2007	1.14.1	Annual reporting	07-SPCO-S-005	SAT
Utility	n/a	3/20/2007	1.14.1	Annual reporting	07-SPCO-S-006	SAT

3.3.5 Appraisals

<u>Alpine Pipeline</u>	<u>ADL #</u>	<u>State Acres</u>	<u>Rental</u>	<u>Next Appraisal Due</u>
Oil Operations ROW	415701	148.66	\$22,299	December 15, 2008
Diesel Operations ROW	415932	128.51	\$22,276	December 15, 2008
Utility Operations ROW	415857	148.65	\$22,298	December 15, 2008

3.4 Upcoming Issues

3.4.1 Lessee's Activities

In 2007, CPAI plans to conduct several regularly scheduled *Operations Compliance Management System* audits on topics including SCADA, Operations Procedures and Operator Qualifications, USDOT Security, Surveillance and Monitoring, and others. System upgrades planned for 2007 include improvements to power generation at the Colville River HDD site.

3.4.2 SPCO Activities

During FY08, the lease administration team expects to complete a transfer of interests for the Alpine Oil Pipeline ROW lease from CPC to Alpine Transportation Company, which is a partnership 65% owned by Alpine Pipeline Company (a wholly owned subsidiary of CPC), 18.333% by Anadarko Alaska Pipeline Systems (a wholly owned subsidiary of Anadarko Petroleum Corporation), 15% by ASRC Pipeline Company (a wholly owned subsidiary of Arctic Slope Regional Corporation) and 1.667% by Kuukpik Transportation Company, LLC (a wholly owned subsidiary of Kuukpik Corporation, the village Native corporation for Nuiqsut). Though CPC is the current ROW leaseholder, Alpine Transportation Company owns the Alpine Oil Pipeline. The lease transfer will align the ROW interest with the balance of partnership assets.

During FY08, the compliance team plans to focus surveillances on quality assurance programs. The lessee's 2007 annual report, due January 31, 2008, will also be reviewed. The team may conduct surveillance of the Alpine Diesel Pipeline to observe the location where the pipeline came off of an HSM.

3.5 Lease-Required Contact Information

The Alpine ROW leases and grant require the lessee/grantee to designate in writing a registered agent, authorized representative, and field representative. CPC updated the Registered Agent and Authorized Representative on May 2, 2007. The Field Representative was updated on June 27, 2007.

Registered Agent

and Authorized Representative

Required by Lease Section 30

Karen L. Kennedy, Operations and Engineering Manager
Alpine Transportation Company
ConocoPhillips Alaska, Inc.
P.O. Box 100360 ATO 908
Anchorage, AK 99510-0360

Field Representative

Required by Lease Section 30

Malcolm Huson, NSOD Pipeline Operations Supervisor
ConocoPhillips Alaska, Inc.
P.O. Box 196105, NSK 22
Anchorage AK 99519-6105

4 Kuparuk and Oliktok Pipelines



The Kuparuk Pipeline and Extension transport processed crude oil from Alpine, Milne Point, and Kuparuk to Pump Station 1. The Oliktok Pipeline transports natural gas liquids to Kuparuk.

4.1 Right-of-Way Lease and Pipeline System Overview

<u>ADL and Lease Name</u>	<u>Lease Effective Date</u>	<u>Lease Expiration Date</u>	<u>Lessee</u>	<u>State Acreage</u>	<u>Survey Number</u>
402294 Kuparuk Pipeline (KPL)	August 26, 1980	May 2, 2034	Kuparuk Transportation Company (KTC) (owned by Kuparuk Pipeline Company, a CPC subsidiary, BPTA, and Union Kuparuk Company)	485.58 acres operations ROW	ASLS 87-15
409027 Kuparuk Pipeline Extension (KPLX)	April 18, 1983	May 2, 2034	KTC	159.09 acres operations ROW	ASLS 87-15
411731 Oliktok Pipeline (OPL)	June 1, 1986	May 2, 2034	Oliktok Pipeline Company (OPC) (wholly owned by CPC)	485.58 acres operations ROW	ASLS 87-15
<u>ROW Lease Amendments</u>	<u>Event</u>	<u>Length</u>	<u>Description</u>	<u>State Acreage</u>	<u>Survey Number</u>
April 26, 1983	24" pipeline	28 miles	Upgraded lease from 16" to 24" pipe (450 ft construction ROW width)	1,283.4 acres construction ROW	ASLS 87-15
November 26, 2002	Renewal	n/a	Renewed leases for 30 years	n/a	n/a
January 23, 2004	Addition	50x80 feet	Added area for a pig launcher shelter; acreage subject to re-plat	≤ 0.095 acres	ASLS 05-35

The Kuparuk Pipeline transports processed crude oil from Kuparuk Central Processing Facility (CPF) 1 and the Milne Point Pipeline eastward to TAPS Pump Station 1. The Kuparuk Pipeline Extension transports processed crude oil from Alpine and CPF-2 to CPF-1 for further transport. The Oliktok Pipeline transports natural gas liquids from Prudhoe Bay to Kuparuk CPF-1. The KPL and OPL share the same horizontal and vertical supports between CPF-1 and TAPS Pump Station 1. All three pipelines are located above ground except at caribou and road crossings.

All three of these pipeline rights-of-way are in operations width, typically 150 feet.

River Crossings: The KPL and OPL cross the Kuparuk River Floodplain and various tributaries as well as Central Milne Creek, East Creek, Sakonowyak River, and the Putuligayak River. The KPL X crosses Ugnuravik River and a minor unnamed drainage. These pipelines are above-ground at all river crossings.

Quality Program: The KTC QA Program was approved by the SPC on October 3, 2006 (letter 06-265-WW). The OPC QA Program, identical to the KTC program, was also approved October 3, 2006 (letter 06-267-WW). The lessee is responsible for complying with this program throughout all phases of Pipeline Activities.

Electronic copies of the Lease Agreements are available at the SPCO website: <http://www.jpo.doi.gov/SPCO/SPCO.htm>. Additional information about the ROW lease and pipeline systems is contained in last year's SPCO report.

<u>Pipeline System</u>	<u>Diameter</u>	<u>Wall Thickness</u>	<u>Product</u>	<u>Year Built</u>	<u>System Length</u>
Kuparuk	24"	0.406" (0.750" in Kuparuk Floodplain)	Sales oil	1984	28 miles (all on State land)
Kuparuk Extension	12" and 18"	0.375"	Sales oil	1981	9 miles (all on State land)
Oliktok	16"	0.342" (0.750" in Kuparuk Floodplain)	Natural gas liquids	1981	28 miles (all on State land)

<u>Pipeline System</u>	<u>2006 Throughput</u>	<u>Maximum Operating Pressure</u>	<u>Maintenance Piggig</u>	<u>Last Smart Pig Run</u>	<u>Current Pipeline Operator</u>
Kuparuk	170,100,000 barrels	1,145 psig at 150°F	Monthly	2006	CPAI
Kuparuk Extension	73,090,836 barrels	1,145 psig at 150°F	Not piggable	Not piggable	CPAI
Oliktok	7,629,612 barrels	1,145 psig at 150°F	Not piggable	Not piggable	CPAI

4.2 Lessee's Annual Report

CPAI, operator of the Kuparuk and Oliktok Pipelines, submitted three separate *2006 Annual Comprehensive Report on Pipeline Activities* binders on behalf of the lessees on time prior to January 31, 2007.

4.2.1 SPCO Review

SPCO review of CPAI's annual reports found them "well organized, thorough, and presented in good detail" (letter 07-031-WW). The high level of detail in these reports was especially helpful to the compliance team for setting surveillance priorities for calendar year 2007 and no follow-up was required.

4.2.2 Lessee's Activities

Below is some information presented in the lessee's 2006 report:

Operations: Both the KPL and KPLX were 100% reliable in 2006. Two planned shutdowns coincided with TAPS shutdowns. The OPL was 99.5% reliable with one unplanned shutdown. Deliveries from the OPL were curtailed in September and October 2006 due to the Prudhoe Bay shutdown.

Audits: in 2006, CPAI followed up on action items identified in a 2005 audit. Additionally, CPAI conducted an HSE self-audit for the Kuparuk River Unit.

Integrity Management Plan (IMP): The USDOT conducted an integrity management inspection of CPAI's North Slope pipelines November 14-16, 2006. In August 2006, CPAI revised the IMP to reflect organizational changes and to incorporate external corrosion direct assessment.

Emergency Preparedness Drill: On January 26, 2006, a drill was conducted on the Alpine and Kuparuk pipelines for response to a TAPS outage of one to three weeks. Pipeline shutdown, start-up, and product storage was reviewed.

Internal Safety Programs: Kuparuk's safety program focuses on employee observations. In 2006, Kuparuk personnel at CPFs 1, 2, and 3 generated 4,095 observations, of which 1,860 were classified as "audits, near misses, or hazard IDs". There were no OSHA reportable accidents in 2006 related to pipeline activities.

Break-out Tank Containment Repair: The Divert Tank A at CPF-2 was taken out of service temporarily on October 12, 2006 to repair damages to secondary containment caused by high winds. The tank was back online October 17.

New Connection: A third-party connection including a 12-inch valve and bleed ring was completed at the intersection of Oliktok Road and Spine Road. It is not in use.

4.2.3 Lessee's Surveillance & Monitoring

The Surveillance & Monitoring Program requires the lessee to monitor conditions that could impact pipeline integrity, public health and safety, and the environment. The

lessee is required to implement the program during pipeline operations and maintenance. In their *2006 Annual Comprehensive Report on Pipeline Activities*, CPAI provided a detailed matrix of all surveillance and monitoring tasks including work order numbers, frequencies, and completion dates. This information is too detailed to duplicate here, but it is located in the case files.

Aerial Surveillance: During 2006, the KPL/OPL ROW was inspected aerially 118 times. Of these inspections, 56 utilized forward-looking infrared (FLIR). The KPLX ROW had 154 over-flights including 46 FLIR inspections.

Maintenance Pigging: During 2006, eight of twelve planned KPL cleaning pig runs occurred. In 2005, only six of twelve planned runs occurred. In both years, pig runs have been cancelled due to sump pump issues. Additionally this year, "pro-ration" and "resource issues" were reasons given for not meeting the cleaning pig target.

Bridge Inspections: Some additional large sandbags were placed at the Hamilton Bridge abutments for scour repair. After extensive evaluation, KTC has determined replacement to be the best option for the Bailey Bridge.

KPL In-Line Inspection: Data analysis from the 2006 pig run indicated no immediate threats to pipeline integrity. Of eight anomalies evaluated, the worst wall loss was 38%. CPAI also inspected numerous potential external corrosion locations with wet insulation. One location was refurbished. There are currently 40 sleeves welded onto the KPL.



In August 2006, the compliance team attended the launch and retrieval of this magnetic flux leakage in-line inspection tool. The tool is pictured here being removed from the pig receiver module by a crane onto a flatbed truck.

4.3 SPCO Activities

4.3.1 Lease Administration

In FY07, the lease administration team issued letters of non-objection for CPAI to install guardrails, VSMs, a light pole, and a power transmission line within the ROWs. The lease administration section has received and reviewed documents to support KTC's application to the North Slope Borough (NSB) for acceptance of Alaska State Land Survey (ASLS) 2005-35. ASLS 2005-35 is a requirement of a KPL ROW lease amendment dated January 23, 2004. The completion and acceptance of ASLS 2005-35 will add approximately 4,160 square feet (0.095 acres) to the ROW to accommodate a pig launcher shelter. After the NSB signs ASLS 2005-35, it will be reviewed and approved by the ADNR survey section.

4.3.2 Compliance Oversight

During FY07, the compliance oversight team conducted three field surveillances of the Kuparuk and Oliktok pipelines and rights-of-way to evaluate lease compliance, visit river and stream crossings, observe the launch and retrieval of an in-line inspection device (smart pig), and evaluate the lessee's communications capability. During FY07, 32 surveillance reports were signed related to the field trips and to SPCO review of the lessee's annual report. During FY07, 12 reports were signed for the KPL, 12 for the KPLX, and 8 for the OPL. Please note that some surveillance reports were issued under a different numbering system.

4.3.3 Summary of FY07 Field Surveillance

July 17-20, 2006: The compliance oversight team evaluated the Alpine, Kuparuk, and Oliktok pipelines for general lease compliance, and also visited every stream and river crossing to evaluate bank stabilization and erosion, sedimentation, and revegetation of disturbed areas. All conditions were reported as satisfactory (letter 06-307-WW).

August 24, 2006: The compliance oversight team attended the launch and retrieval of an in-line inspection tool also known as a smart pig, which was being used to detect potential internal and external corrosion in the Kuparuk Pipeline. Smart pigging is part of the KPL surveillance and monitoring program. All conditions were reported as satisfactory (letter 06-321-WW). The compliance team followed up by requesting ILI data and CPAI's analysis. This was reviewed by a State engineer.

August 25, 2006: A compliance team member looked at various hardware and software that is part of the lessee's communications capability for the Kuparuk and Oliktok pipelines. Most of these components are related to the pipeline's leak detection system. The surveillant also looked at the meters and meter provers at CPF-2. All conditions were reported as satisfactory (letter 06-318-WW).

4.3.4 Summary of SPCO Surveillance Reports Signed in Fiscal Year 2007

<u>ROW</u>	<u>Field Trip Date</u>	<u>Date Signed</u>	<u>Stipulation</u>	<u>Description</u>	<u>Report #</u>	<u>Finding</u>
KPL	7/17/2006	11/1/2006	1.3	Furnishing requested information	06-SPCO-S-036	SAT
KPL	7/17/2006	11/1/2006	1.10	Surveillance & Monitoring	06-SPCO-S-037	SAT
KPL	7/17/2006	11/1/2006	2.3	Erosion and sedimentation control	06-SPCO-S-038	SAT
KPL	7/17/2006	11/1/2006	2.4.1	Fish passage	06-SPCO-S-039	SAT
KPL	7/17/2006	11/1/2006	3.2	Workpad maintenance	06-SPCO-S-040	SAT
KPLX	7/17/2006	11/1/2006	1.3	Furnishing requested information	06-SPCO-S-041	SAT
KPLX	7/17/2006	11/1/2006	1.10	Surveillance & Monitoring	06-SPCO-S-042	SAT
KPLX	7/17/2006	11/1/2006	2.3	Erosion and sedimentation control	06-SPCO-S-043	SAT
KPLX	7/17/2006	11/1/2006	2.4.1	Fish passage	06-SPCO-S-044	SAT
KPLX	7/17/2006	11/1/2006	3.2	Workpad maintenance	06-SPCO-S-045	SAT
OPL	7/17/2006	11/1/2006	1.3	Furnishing requested information	06-SPCO-S-046	SAT
OPL	7/17/2006	11/1/2006	1.10	Surveillance & Monitoring	06-SPCO-S-047	SAT
OPL	7/17/2006	11/1/2006	2.3	Erosion and sedimentation control	06-SPCO-S-048	SAT
OPL	7/17/2006	11/1/2006	2.4.1	Fish passage	06-SPCO-S-049	SAT
OPL	7/17/2006	11/1/2006	3.2	Workpad maintenance	06-SPCO-S-050	SAT
KPL	8/25/2006	11/22/2006	1.4.1	Communications	06-SPCO-S-059	SAT
KPLX	8/25/2006	11/22/2006	1.4.1	Communications	06-SPCO-S-060	SAT
OPL	8/25/2006	11/22/2006	1.4.1	Communications	06-SPCO-S-061	SAT
KPL	8/24/2006	11/30/2006	1.6.1	Plans and programs	06-SPCO-S-062	SAT
KPL	8/24/2006	11/30/2006	1.8.2	QA: corrosion	06-SPCO-S-063	SAT
KPL	8/24/2006	11/30/2006	1.10.1	Surveillance & Monitoring: corrosion	06-SPCO-S-064	SAT
KPL	8/24/2006	11/30/2006	3.4.1	Early detection of corrosion	06-SPCO-S-065	SAT
KPLX	8/24/2006	11/30/2006	1.6.1	Plans and programs	06-SPCO-S-066	SAT
KPLX	8/24/2006	11/30/2006	1.8.2	QA: corrosion	06-SPCO-S-067	SAT
KPLX	8/24/2006	11/30/2006	1.10.1	Surveillance & Monitoring: corrosion	06-SPCO-S-068	SAT
KPLX	8/24/2006	11/30/2006	3.4.1	Early detection of corrosion	06-SPCO-S-067	SAT
KPL	n/a	3/20/2007	Section 4	Covenants of lessee	07-SPCO-S-007	SAT
KPL	n/a	3/20/2007	1.3.3	Responsibilities	07-SPCO-S-008	SAT

<u>ROW</u>	<u>Field Trip Date</u>	<u>Date Signed</u>	<u>Stipulation</u>	<u>Description</u>	<u>Report #</u>	<u>Finding</u>
KPLX	n/a	3/20/2007	Section 4	Covenants of lessee	07-SPCO-S-009	SAT
KPLX	n/a	3/20/2007	1.3.3	Responsibilities	07-SPCO-S-010	SAT
OPL	n/a	3/20/2007	Section 4	Covenants of lessee	07-SPCO-S-011	SAT
OPL	n/a	3/20/2007	1.3.3	Responsibilities	07-SPCO-S-012	SAT

4.3.5 Appraisals

<u>Lease</u>	<u>ADL #</u>	<u>State Acres</u>	<u>Rental</u>	<u>Next Appraisal Due</u>
Kuparuk Operations ROW	402294	485.58	\$84,516	August 26, 2007
Kuparuk Ext. Operations ROW	409027	159.09	\$31,818	September 29, 2008
Oliktok Operations ROW	411731	485.58	\$84,516	January 1, 2008

4.4 Upcoming Issues

4.4.1 Lessee's Activities

During 2007, KTC plans to replace valve actuators for KPL valves ROV-9383 and ROV-9384. The KPLX valve actuator for MOV-AU9002 will also be replaced. Four valve actuators for the OPL will be replaced. Other system projects include replacing the flow computer, fast loop sampler, and pig launcher and receiver actuator upgrades for the KPL. KTC has also indicated they plan to replace the Bailey Bridge in 2007.

4.4.2 SPCO Activities

In FY08, surveillance efforts may focus on quality assurance programs. The lessee's 2007 annual report, due January 31, 2008, will also be reviewed. The lease administration team will follow-up on the KPL pig launcher shelter as-built survey.

4.5 Lease-Required Contact Information

In the Kuparuk and Oliktok ROW lease agreements, Section 4(j) requires the lessee to designate a registered agent. Lease Stipulation 1.3.2 requires a field representative and authorized representative available to communicate with the SPCO. These contacts are the same for all three leases. The Field Representative was updated June 27, 2007.

Registered Agent

Required by Lease Section 8(j)

and Authorized Representative

*Required by Lease Section 30
and Stipulation 1.3.2*

Field Representative

*Required by Lease Section 30
and Stipulation 1.3.2*

Karen L. Kennedy, Operations and Engineering Manager
Kuparuk Transportation Company
Oliktok Pipeline Company
P.O. Box 100360 ATO 908
Anchorage, AK 99510-0360

Malcolm Huson, NSOD Pipeline Operations Supervisor
ConocoPhillips Alaska, Inc.
P.O. Box 196105, NSK 22
Anchorage AK 99519-6105

5 Badami Pipelines



The Badami Pipelines connect the North Slope's easternmost development, Badami, to infrastructure at Endicott. The pipelines cross 25 miles of roadless tundra.

5.1 Right-of-Way Lease and Pipeline System Overview

<u>ADL and Lease Name</u>	<u>Lease Effective Date</u>	<u>Lease Expiration Date</u>	<u>Lessee</u>	<u>State Acreage</u>	<u>Survey Number</u>
415472 Badami Sales Oil Pipeline	December 15, 1997	December 14, 2022	BP Transportation (Alaska), Inc (BPTA)	1,240 acres construction ROW	EPF 2002-18 (not approved)
415965 Badami Utility Pipeline	December 15, 1997	December 14, 2022	BPTA	352.1 acres construction ROW	EPF 2002-18 (not approved)
<u>ROW Lease Amendments</u>	<u>Event</u>	<u>Length</u>	<u>Description</u>	<u>State Acreage</u>	<u>Survey Number</u>
November 10, 2002	Renewal	n/a	Renewal of both leases for 30 years	No change	n/a

The Badami Pipelines connect the North Slope's easternmost oil development, Badami, to the Endicott Development. The Badami Oil Pipeline begins at the Badami Central Production Facility where the pig launcher, mainline pumps, and metering equipment are located. It ends approximately 25 miles to the west at a tie-in with the Endicott Pipeline. The Badami Oil Pipeline transported a decreasing amount of oil during FY07 and was scheduled to be taken out of service during the summer of 2007. The Badami Utility Pipeline begins at Endicott's Satellite Drilling Island and was designed to transport miscible injectant from Endicott to

Badami. In the past, it has only been used to supply fuel gas for starting up Badami, and was not operated in 2006.

Currently, the rights-of-way are in construction width (300 feet in most places for the oil pipeline). The ROW is wider at river crossings. Construction of the Badami Utility Pipeline took place within the ROW of the Sales Oil Pipeline. As-built surveys have been submitted for the pipelines, though the Badami Utility Pipeline survey was incomplete. When the *ROW Release of Interest* process is completed, the ROW will be reduced to operations width.

River Crossings: The Badami pipelines were trenched under the Kadleroshilik, Shaviovik (Shav), No Name, and East Channel of the Sagavanirktok (Sag) River.

Quality Program: The BPTA Quality Assurance Program was approved by the SPC on December 21, 2004 (letter 04-101-WW). The lessee is responsible for complying with this program throughout all phases of construction, operations, maintenance, and termination.

Electronic copies of the Lease Agreements are available at the SPCO website: <http://www.jpo.doi.gov/SPCO/SPCO.htm>. Additional information about the leases and pipeline systems is contained in last year's SPCO report, also available on the website.

<u>Pipeline System</u>	<u>Diameter</u>	<u>Wall Thickness</u>	<u>Product</u>	<u>Year Built</u>	<u>System Length</u>
Badami Sales Oil	12"	0.281" to 0.500"	Sales-quality crude oil	1998-1999	25 miles (all on State land)
Badami Utility	6"	0.375" to 0.472"	Natural gas and product	1998-1999	31 miles (all on State land)

<u>Pipeline System</u>	<u>2006 Throughput</u>	<u>Maximum Operating Pressure</u>	<u>Maintenance Pigging</u>	<u>Last Smart Pig Run</u>	<u>Current Pipeline Operator</u>
Badami Sales Oil	482,563 net barrels	1,415 psig at 150°F (design)	Twice in 2006	2003	BP Exploration Alaska (BPXA)
Badami Utility	None	Not in service	Not in service	Never	BPXA

5.2 Lessee's Annual Report

BPTA submitted a *2006 Surveillance and Monitoring Report* for the Badami, Endicott, Milne, and Northstar pipelines on February 26, 2007. BPTA requested and was granted a due date extension for annual reporting in order to compile more detailed reports this year.

5.2.1 SPCO Review

After thoroughly reviewing BPTA annual reports, the SPCO accepted them. BPTA was thanked for providing a thorough and detailed document that incorporated the comments from last year's review. The reports were greatly improved, allowing the compliance team to better set surveillance priorities. Surveillance reports 07-SPCO-S-013 and 014 document acceptance of the annual reports (letter 07-002-TG).



Above, remotely operated valve RTU-2 is located on the East Bank of the East Channel of the Sagavanirktok River.

5.2.2 Lessee's Activities

Below is some information presented in the lessee's 2006 report:

Integrity Management Program (IMP): BPTA's USDOT IMP, which had only applied to the Northstar Oil Pipeline, has been now been applied to other BPXA-operated North Slope crude oil sales lines that could affect a *high consequence area*. During November 13-17, 2006, subject matter experts gathered with operators, owners, and contractors for a comprehensive qualitative risk assessment for BPTA pipelines. Outside consultants developed hydraulic surge analysis, spill spread modeling, mapping, and geo-hazard identification. Preventive and mitigative measures are being implemented in 2007 and onward. BPTA submitted detailed information on this process in their 2006 report.

Internal Safety Program: Employees at Badami facilities participate in BP's internal safety programs. Badami managers conducted 126 Advanced Safety Audits (ASAs) in 2006.

5.2.3 Lessee's Surveillance & Monitoring

The BPTA Surveillance & Monitoring Program, which applies to all BPTA-administered leases (Badami, Endicott, Milne, and Northstar), requires the pipeline operator to monitor conditions that could impact pipeline integrity, public health and safety, and the environment. The lessee is required to implement the program during pipeline operations and maintenance. The current program was approved by the SPC September 9, 2004 (letter 04-053-WW). A new draft program has been submitted and is now being re-worked by BPTA after preliminary SPCO review. The new program is anticipated to be submitted to the SPCO during FY08. The results of 2006 surveillance and monitoring are presented below.

Aerial Surveillance: In 2006, Shared Services Aviation conducted 81 aerial visual inspections of the Badami pipelines, including seven FLIR flights.

Annual Ground Survey: The 2006 USDOT annual ground survey was completed April 24, 2006. No deficiencies were found on the Badami Utility Pipeline, but fifteen sheet metal perforations of less than one inch diameter were re-sealed on the Badami Oil Pipeline.

Cathodic Protection (CP) Survey: The annual USDOT survey was completed in September 2006. The CP system only applies at buried river crossings.

Sag River Weir: 2006 weir inspections were conducted June 1, July 8, and August 10, and indicated additional erosion control measures are necessary at the site. In October 2006, F. Robert Bell and Associates completed an as-built survey of the site. BPTA continues work with the SPCO and other agencies to achieve a long-term, permanent, engineered solution.

5.3 SPCO Activities

5.3.1 Lease Administration

The lease administration team has reviewed the Badami Utility Pipeline as-built survey per Lease Section 25. An as-built survey must be approved in order to complete the *ROW Release of Interests* process from construction acreage to operational acreage. The Record of Survey, Engineering Plat File (EPF) 2002-18, has been submitted and depicts the complete ROW for the Badami Oil Pipeline but does not include the location of the Badami Utility Pipeline on State lands within the corridor of the Endicott Pipeline ROW (ADL 410562) as depicted in Alaska State Lands Survey (ASLS) 84-96. On November 6, 2007, the SPCO sent letter 06-220-WW asking BPTA to submit within 30 days notification of intent, with a projected date, to complete the additional survey depicting all State lands encumbered by ADL 415965. This has not been received as of August 6, 2007. The *ROW Release of Interests* is pending based on this outstanding action. BPTA will continue to pay construction acreage rental until the as-built survey is submitted and approved.

5.3.2 Compliance Oversight

During FY07, the compliance oversight team conducted five field surveillances of the Badami pipelines (one of these field trips only applied to the Badami Utility Pipeline). During FY07, 12 Badami Oil Pipeline and 11 Badami Utility Pipeline surveillance reports were signed related to field trips from FY06, FY07 and to SPCO review of the lessee's annual report. Please note that some surveillance reports were issued under an old numbering system.

Corrosion: An SPCO surveillant and two State engineers met with BPXA and BPTA representatives to discuss corrosion on BPTA pipelines. This surveillance occurred in FY06 and is reported on in last year's annual report. The surveillance reports ANC-06-S-108 and 109 were not finalized until FY07 so they appear in this year's tally (letter 06-206-WW).

Badami Weir Site Visit June 1, 2006: A compliance team member observed annual monitoring and restoration activities at the Badami weir. The weir was constructed to mitigate erosion which was removing pipeline backfill and threatening to drain an important oxbow lake and *Arctophila fulva* wetland habitat. This surveillance occurred in FY06 and is reported on in last year's annual report. Surveillance reports ANC-06-S-083, 084, 087, and 088, which described unsatisfactory conditions at the site, were not finalized until FY07 so they appear in

this year's tally (letter 06-186-WW). The compliance team is currently working with the lessee to develop a long-term solution for the site.

Badami Weir Meetings: During the winter, SPCO representatives met repeatedly with BPTA and BPXA representatives to develop a solution for the Badami Weir site. The first meeting occurred on October 11, 2006, and was also attended by representatives from the ADNR Office of Habitat Management and Permitting (OHMP) and the US Army Corps of Engineers (USACE). After this meeting, BPTA was directed to develop both a short and long term site solution to maintain historic water levels, prevent erosion and sedimentation, and protect the Badami Pipelines. On January 18, 2007, another meeting was held among agency representatives for BPTA to present a draft proposal, which was not approved due to a lack of supporting information. In letter 07-006-WW, the SPC writes, "While the weir is functioning to maintain the wetland water level, it has failed in its other design objectives. The Badami Weir site is unstable and conditions will further deteriorate without interim corrective action prior to spring break-up this year." SPCO, OHMP, and USACE agreed that BPTA should submit an Interim Corrective Action and Data Acquisition Plan to stabilize the site while researching a long-term solution. The Interim Plan was approved on February 26, 2007 (letter 07-025-WW), and the SPCO has been tracking progress with regular project updates.

5.3.3 Summary of FY07 Field Surveillance

ROW Release of Interests July 31 – August 4, 2006: The compliance team lead reviewed State lands in the construction ROW to see if they were in adequate condition to be released per the *ROW Release of Interests Process*. The surveillant flew the ROW and circled river crossings. The ADEC spills database was queried for discharges on State lands to be released. The release was not completed in FY07 because several outstanding items remain, including the lack of a complete as-built survey for the Badami Utility Pipeline, problems with the Sag River Weir, slumping at the east bank of the Shav River, and pipeline vibration dampener issues. Surveillance reports 06-SPCO-S-026 through 033 document the surveillance (letter 06-279-WW). Unsatisfactory reports are related to the Badami Weir.

March 22, 2007: During surveillance of the Endicott Pipeline, a cable was discovered hanging below the Badami Utility Pipeline which had the potential to impact wildlife movements. The Lease requires the Pipeline System be maintained to avoid significant alterations of wildlife movements. Since the cable was no longer in use, BPXA personnel removed it and submitted digital pictures for documentation (letter 07-052-WW).

April 15, 2007: The SPCO conducted surveillance of the Badami Weir Interim Corrective Action and Data Acquisition Plan (Plan). The surveillant arrived just as sandbagging was completed. As approved in the Plan, the weir wing walls were painted white to decrease absorption of thermal energy, a gauge had been painted on the wing walls, snow and ice was removed from the weir, notches cut into the ice above the weir, and dark material spread to promote early melting. These efforts were targeted at encouraging water to flow *through* rather than *around* the weir during break-up. By-pass channels around the sides of the weir had caused extensive erosion in prior years, so these areas were armored with sandbags and geotextile liner. Two large sandbag dikes were constructed to divert water towards the weir. Access to the site was over ground-fast ice on the Sag River, greatly limiting tundra travel. The surveillant also traveled to RTU-2 across the Sag from the weir, where BPTA had proposed to store two propane tanks and a thermoelectric generator to supply power to the cameras for weir monitoring. All conditions were reported as satisfactory (letter 07-055-WW).

May 31, 2007: To follow-up on implementation of the Plan, the surveillant again visited the weir during spring break-up. The sandbags and erosion protection had withstood initial flooding and the site was in much improved condition as compared to the same time last year, prior to the interim corrective action. Geotechnical work had been mostly completed and boreholes were marked with PVC pipe to enable soil temperature measurements. A hydrology team including an engineer, two BPXA project leads, the BPXA Endicott/Badami Environmental Advisor, and a GCI technician visited the site. During aerial surveillance of the ROW at other river crossings, the surveillant noted slumping on the east side of the Shaviovik River. The site will be visited in FY08 to see if further action is needed.

5.3.4 Summary of SPCO Surveillance Reports Signed in FY07

<u>Lease</u>	<u>Field Trip Date</u>	<u>Date Signed</u>	<u>Stipulation</u>	<u>Description</u>	<u>Report #</u>	<u>Finding</u>
Oil	6/1/2006	7/27/2006	2.3	Erosion and sedimentation	ANC-06-S-083	UNSAT
Oil	6/1/2006	7/27/2006	2.4.3	Abandoned water diversion structures	ANC-06-S-084	UNSAT
Oil	6/1/2006	7/27/2006	2.10.2	Revegetation	ANC-06-S-086	SAT
Utility	6/1/2006	7/27/2006	2.3	Erosion and sedimentation	ANC-06-S-087	UNSAT
Utility	6/1/2006	7/27/2006	2.4.3	Abandoned water diversion structures	ANC-06-S-088	UNSAT
Utility	6/1/2006	7/27/2006	2.10.2	Revegetation	ANC-06-S-090	SAT
Oil	6/1/2006	8/4/2006	1.6.1(4)	Surveillance & monitoring: corrosion	ANC-06-S-108	SAT
Oil	6/1/2006	8/4/2006	3.2.1	Corrosion: early detection	ANC-06-S-109	SAT
Oil	7/31/2006	11/28/2006	Sec. 14(a)	Quality Assurance	06-SPCO-S-026	SAT
Oil	7/31/2006	11/28/2006	Sec. 16(a)	Environmental compliance	06-SPCO-S-027	SAT
Oil	7/31/2006	11/28/2006	2.11.1	Spill reporting	06-SPCO-S-028	SAT
Oil	7/31/2006	11/28/2006	3.1.3.1	Surface modification	06-SPCO-S-029	UNSAT
Utility	7/31/2006	11/28/2006	Sec. 14(a)	Quality Assurance	06-SPCO-S-030	SAT
Utility	7/31/2006	11/28/2006	Sec. 16(a)	Environmental compliance	06-SPCO-S-031	SAT
Utility	7/31/2006	11/28/2006	2.11.1	Spill reporting	06-SPCO-S-032	SAT
Utility	7/31/2006	11/28/2006	3.1.3.1	Surface modification	06-SPCO-S-033	UNSAT
Oil	n/a	4/9/2007	1.6.2	Annual reporting	07-SPCO-S-013	SAT
Utility	n/a	4/9/2007	1.6.2	Annual reporting	07-SPCO-S-014	SAT
Utility	3/22/2007	4/25/2007	2.6.1	Wildlife passage	07-SPCO-S-035	SAT
Oil	4/15/2007	5/9/2007	2.3	Erosion & sedimentation	07-SPCO-S-038	SAT
Oil	4/15/2007	5/9/2007	2.7	Disturbance of natural waters	07-SPCO-S-039	SAT
Utility	4/15/2007	5/9/2007	2.3	Erosion & sedimentation	07-SPCO-S-040	SAT
Utility	4/15/2007	5/9/2007	2.7	Disturbance of natural waters	07-SPCO-S-041	SAT

5.3.5 Appraisals

<u>Badami Pipeline</u>	<u>ADL #</u>	<u>State Acres</u>	<u>Rental</u>	<u>Next Appraisal Due</u>
Oil Construction ROW	415472	1,240	\$186,000	December 15, 2007
Utility Construction ROW	415965	352.10	\$69,680	December 15, 2007



The Badami Weir was built to prevent erosion of the pipeline backfill at west bank of the pipelines' Sag River crossing. This photo from July 13, 2007 shows the weir after interim corrective action temporarily stabilized the site. BPTA is currently working on a long-term solution.

5.4 Upcoming Issues

5.4.1 Lessee's Activities

During 2007, BPTA plans to continue surveillance and monitoring of the Badami Pipelines. The annual ground survey was completed in spring 2007, and the cathodic protection survey is scheduled for the 3rd quarter. BPTA plans to conduct a Risk Assessment Review of the Sales Oil Pipeline (per the USDOT Integrity Management Program). A smart pig is scheduled to be run prior to discontinuing service of the line in late August. With the pipeline's throughput so low (approximately 1,000 barrels per day), the oil takes over two weeks to get from Badami to RTU-3. To push the smart pig at its optimum speed, the Badami Utility Pipeline will be used to supply gas to propel the smart pig and a "corrosion inhibitor pill" behind it.

The Badami Weir continues to be a significant project for BPTA and contractors. A new proposed long-term, engineered solution for the site will be submitted to the SPCO in fall 2007. If approved by the SPCO, the plan will be implemented in spring 2008.

5.4.2 SPCO Activities

The next ROW appraisal is due December 15, 2007. The lease administration team also plans to follow up on the incomplete survey for the Badami Utility Pipeline. Surveillance in FY08 will focus on Quality Assurance and Surveillance and Monitoring programs, the Badami shutdown in August 2007, and continuing progress of stabilizing the Badami Weir site. The team also plans to visit other river crossings along the ROW, especially the Shav River. The lessee's 2007 annual report, due January 31, 2008, will also be reviewed.

5.5 Lease-Required Contact Information

The Badami Pipeline leases require the lessee to designate in writing a registered agent and authorized and field representatives.

Registered Agent

Required by Lease Section 8(j)

CT Corporation, Re: BPTA
Suite 2002
9360 Glacier Highway
Juneau, Alaska 99801

Authorized Representative

Required by Lease Section 26

Ken Konrad, President, BPTA
Michael Rocereta, Vice President, BPTA
William H. Clifton, Joint Venture Coordinator, BPTA
Glen Pomeroy, TAPS Performance Manager, BPTA
BP Transportation (Alaska) Inc.
P.O. Box 190848
Anchorage, Alaska 99519-0848

Field Representative

Required by Lease Section 26

Bruce W. Robinson or Thomas J. Barnes
Mail Stop END
900 E. Benson Blvd.
Anchorage, AK 99508

6 Endicott Pipeline



The 26-mile long Endicott Pipeline transports crude oil from man-made Endicott Island to TAPS.

6.1 Right-of-Way Lease and Pipeline System Overview

<u>ADL and Lease Name</u>	<u>Lease Effective Date</u>	<u>Lease Expiration Date</u>	<u>Lessee</u>	<u>State Acreage</u>	<u>Survey Number</u>
410562 Endicott Pipeline	August 5, 1986	May 2, 2034	Endicott Pipeline Company (EPC) {owned by managing partner BPTA (57.45%) and subsidiaries of ExxonMobil (21.02%), Unocal (10.52%), Amoco (10.49%), NANA Regional (0.39%) and Doyon Ltd. (0.13%)}	1,072.636 acres operations ROW	ASLS 84-96
<u>ROW Lease Amendments</u>	<u>Event</u>	<u>Length</u>	<u>Description</u>	<u>State Acreage</u>	<u>Survey Number</u>
April 17, 1992	Address change	n/a	Updated ADNR address for rental payments	No change	n/a
June 28, 2002	Renewal term change	n/a	Updated lease to reflect new law allowing 30-year renewal term	No change	n/a
November 26, 2002	30-year renewal	n/a	Entire lease renewed to May 2, 2034	No change	n/a

The Endicott Pipeline transports processed crude oil from the offshore Endicott Development to TAPS Pump Station 1. The pipeline begins at Endicott's Main Production Island. The Badami Oil Pipeline ties in at the approximate mid-point. In FY07, the pipeline also transported crude oil from Prudhoe Bay's Flow Station 2.

The ROW is currently in operations width, approximately 150 feet wide, except on the causeway where the ROW is 500 feet wide.

River Crossings: The pipeline crosses the West Channel Sag River on a pipe bridge.

Quality Program: The Endicott Quality Assurance Program was approved by the SPC December 21, 2004 (letter 04-101-WW). The lessee is responsible for complying with this program throughout all phases of Pipeline Activities.

An electronic copy of the ROW Lease Agreement is available at the SPCO website: <http://www.jpo.doi.gov/SPCO/SPCO.htm>. Additional information about the lease and pipeline system is contained in last year's SPCO report.

<u>Pipeline System</u>	<u>Diameter</u>	<u>Wall Thickness</u>	<u>Product</u>	<u>Year Built</u>	<u>System Length</u>
Endicott Pipeline	16"	0.312"	Sales-quality crude oil	1987	26 miles (all on State land)
<u>Pipeline System</u>	<u>2006 Throughput</u>	<u>Maximum Pressure</u>	<u>Maintenance Piggings</u>	<u>Last Smart Pig Run</u>	<u>Current Pipeline Operator</u>
Endicott Pipeline	5,957,551 net barrels	1,200 psig at 180° F (operating)	Quarterly	2005	BP Exploration Alaska (BPXA)

6.2 Lessee’s Annual Report

BPTA, managing partner of EPC, submitted a *2006 Surveillance and Monitoring Report* for the Badami, Endicott, Milne and Northstar pipelines on February 26, 2007. BPTA requested an extension of the due date for annual reporting in order to compile more detailed reports this year. The SPC granted the extension.

6.2.1 SPCO Review

After thoroughly reviewing BPTA annual reports, the SPCO accepted them through letter 07-002-TG. BPTA was thanked for providing a thorough and detailed document that incorporated the comments from last year’s review. The reports were greatly improved, allowing the compliance team to better set surveillance priorities. Surveillance report 07-SPCO-S-015 documents acceptance of the annual report.

6.2.2 Lessee's Activities

Below is some information presented in the lessee's 2006 report:

Integrity Management Program: BPTA's USDOT Integrity Management Program, which had only applied to the Northstar Oil Pipeline, has now been applied to other BPXA-operated crude oil sales pipelines on the North Slope that could affect a *high consequence area*. During November 13-17, 2006, subject matter experts gathered with operators, owners, and contractors for a comprehensive qualitative risk assessment for BPTA pipelines. Outside consultants developed hydraulic surge analysis, spill spread modeling, mapping, and geo-hazard identification. Preventive and mitigative measures were adopted and are being implemented in 2007 and onward. BPTA submitted detailed information for each pipeline in their 2006 report to the SPCO.

Internal Safety Program: Employees at Endicott facilities participate in BP's internal safety programs, formally monitoring each other under the Observing Risks, Changes, and Attitudes (ORCA) program. In 2006, Endicott employees generated 690 ORCA observations and managers conducted 1,369 Advanced Safety Audits.

ROW Storage: SPCO granted permission for temporary storage of the Doyon 14 and 7ES Rig Camps on the Endicott Pipeline ROW from March 18 to April 25, 2006.

Alyeska "Near Loss" Incident: On October 12, 2006 during maintenance pigging of the Endicott Pipeline, the Endicott Production Control Room called Pump Station 1 to advise them they had just received a 1,000 foot pig arrival notification but could not contact the pigging crew. The Endicott Control Room operator could not provide procedures, valve numbers, and valve sequence instructions to the PS 1 operator. The pigging crew arrived just in time to receive the pig. As a preventive measure, Endicott reviewed and revised the pigging procedure EPL-115. Though Greater Prudhoe Bay pig operators will still be used, an Operator-Qualified Endicott employee will be present during pigging. In a discussion with an SPCO surveillant in March 2006, the Endicott Area Manager described the incident as a "communication failure." The pigging crew had arrived in time, but was out of communication with the two control rooms.

Pipeline Survey: While reviewing documents for the Prudhoe Bay Bypass jumpers (further discussed below), the SPCO found what was thought to be an error in a drawing depicting the Endicott Pipeline outside of the surveyed ROW near Flow Station 2. Investigation revealed the pipeline is in fact outside of the ROW there. Endicott Pipeline Company will be requesting survey instructions to amend the plat from the Chief Cadastral Surveyor at ADNDR.

6.2.3 Lessee's Surveillance & Monitoring

The BPTA Surveillance & Monitoring Program, which applies to all BPTA-administered leases (Badami, Endicott, Milne, and Northstar), requires the lessee to monitor conditions that could impact pipeline integrity, public health and safety, and the environment. The lessee is required to implement the program during pipeline operations and maintenance. The current program was approved by the SPC September 9, 2004 (letter 04-053-WW). A new draft program has been submitted to the SPCO for consideration, and is now being re-worked by BPTA after preliminary SPCO review. The new program should be submitted for approval in FY08.

ROW Inspections: Security conducted 153 drive-by inspections of the Endicott Pipeline in 2006. Between August 12 and November 21, drive-by inspections were performed twice daily during the time the automated leak detection system was not fully operational due to maintenance of components. Beginning October 13 and continuing through spring 2007, the twice daily drive-by patrols included hand-held FLIR surveys of the pipe. These extra inspections were initiated after the Flow Station 2 hot tap when the new leak detection system was not yet demonstrated. The annual ground survey was performed November 15-22, 2006.

External Corrosion: Locations identified from 2005 smart pigging were inspected. Five dents were examined and found to measure less than 0.200" depth. One location of external corrosion will be excavated in summer 2007 at the Endicott causeway "tee".

6.3 SPCO Activities

6.3.1 Lease Administration

When the Prudhoe Bay Oil Transit Lines were shut down in 2006, BPXA's business resumption plan proposed replacement pipelines and bypass jumpers to the Endicott Pipeline. The SPCO issued a letter of non-objection (07-022-WW) for portions of BPXA's new oil transit lines to be constructed within the Endicott ROW.

Prudhoe Bay By-Pass Jumpers: Shutdown of the eastern oil transit line had greatly diminished Prudhoe Bay production and cut off crude oil supplies feeding the Crude Oil Topping Unit (COTU), the North Slope's main diesel production facility also known as the Crude Oil Topping Plant. As a result, diesel was being trucked from Fairbanks. To keep Flow Station (FS) 2 in production, sales oil was being trucked to Pump Station 1. EPC in conjunction with BPXA proposed to construct four pipeline connections to the Endicott Pipeline from FS-1, FS-2, and both an inlet and outlet to the COTU. State engineers reviewed the design and procedures for hot tapping. An intermediate pipeline support was required at FS-2. A temporary wooden crib support was approved, to be replaced by a permanent support in spring. The SPCO approved the pipeline connections on September 14, 2006 (letter 06-259-WW). Letter 06-261-WW on September 15 contained two requests for additional information. At the end of FY07, only the FS-2 and COTU jumpers were operational. The FS-1 jumper, though mechanically complete, was never used.

6.3.2 Compliance Oversight

During FY07, the compliance oversight team completed two field surveillances of the Endicott Pipeline and reviewed numerous documents related to the FS-1, FS-2, and COTU bypasses. Seven surveillance reports were signed during FY07. Please note that some surveillance reports were issued under a different numbering system.

Corrosion: An SPCO surveillant and two State engineers met with BPXA and BPTA representatives in FY06 to discuss corrosion on BPTA pipelines. This surveillance is

reported on in last year's SPCO report. Surveillance reports ANC-06-S-110 and 111 were not finalized until FY07 so they appear in this year's tally (letter 06-206-WW).

Hot Tap Hydrotest Review: In 06-259-WW, the SPCO requested verification that the Endicott hot taps passed applicable hydrotest standards. Hydrotest graphs and records were submitted. One error was found on a quality control seal and the correction was documented via email.

6.3.3 Summary of FY07 Field Surveillance

September 30-October 1, 2006: The SPCO issued a Construction Authorization to Endicott Pipeline Company under Stipulation 1.7.1 to construct hot taps on the Endicott Pipeline (letter 06-259-WW). SPCO surveillance was scheduled to coincide with drilling of the FS-2 hot tap. Due to delays, the hot tap did not actually occur while the surveillant was on site. The surveillant toured the FS-2 and COTU facilities, observed assembly of the hot tap machine, verified that pig bars were to be installed on the hot taps as required by 06-259-WW, and observed Endicott ROW areas impacted by the tie-ins. She also drove the Endicott ROW to the Main Production Island and back. Surveillance report 06-SPCO-S-034 describes the tie-in work as satisfactory (letter 06-285-WW).

March 22-23, 2007: To evaluate the lessee's communications capability, SPCO surveillance focused on the pipeline's SCADA (supervisory control and data acquisition) system. This system is integral to the pipeline's operations and relies on continuous data transmission. At the time, the leak detection system was not demonstrated to ADEC due to the addition of oil from Flow Station 2. As a result, FLIR operators were inspecting the line twice daily. Leak detection downstream of the Badami tie-in was being handled by BPXA operators at the Eastern Off-take Center (EOC) in the Prudhoe Bay Operations Center. The surveillant toured Endicott production facilities, pipeline pumps, mainline metering, quality bank sampling, and pig launcher. She also observed the Endicott ROW, Badami tie-in, and all four Prudhoe Bay bypass jumpers. On March 23, the surveillant visited the EOC and discussed procedures with the operators. All conditions were reported as satisfactory (letter 07-052-WW).

6.3.4 Summary of SPCO Surveillance Reports Signed in FY07

<u>Field Trip</u>	<u>Date</u>	<u>Stipulation</u>	<u>Description</u>	<u>Report #</u>	<u>Finding</u>
<u>Date</u>	<u>Signed</u>				
6/1/2006	8/4/2006	1.10.1 (4)	SMP: corrosion	ANC-06-S-110	SAT
6/1/2006	8/4/2006	3.4.1 (6)	Early detection of corrosion	ANC-06-S-111	SAT
9/30/2006	10/12/2006	1.7	Construction authorization	06-SPCO-S-034	SAT
n/a	4/9/2007	1.3.3	Responsibilities	07-SPCO-S-015	SAT
3/22/2007	4/25/2007	Sec. 4(d)	State's access	07-SPCO-S-032	SAT
3/22/2007	4/25/2007	1.3.2	Field representative	07-SPCO-S-033	SAT
3/22/2007	4/25/2007	1.4.1	Communications capability	07-SPCO-S-034	SAT

6.3.5 Appraisals

<u>Endicott Pipeline</u>	<u>ADL #</u>	<u>State Acres</u>	<u>Rental</u>	<u>Next Appraisal Due</u>
Endicott Operations ROW	410562	1072.636	\$214,528	August 5, 2007



The above photos are from surveillance of the Construction Authorization for the Endicott Pipeline Connections. **Above left:** "cutters" of various sizes for the hot tap machine that was used for the FS-2 connection. **Above right:** these "pig bars" prevent a pig from diverting into a pipeline connection. Pig bars were required as part of the Authorization.

6.4 Upcoming Issues

6.4.1 Lessee's Activities

During a planned pipe replacement of two causeway flow lines, the Endicott Pipeline will be excavated and inspected in summer 2007. The pipeline is buried crossing the causeway at the intersection of the road to Endicott's Satellite Drilling Island.

6.4.2 SPCO Activities

The lease compliance oversight team plans to conduct field surveillance of the Endicott Pipeline during FY08. Surveillance will focus on Quality Assurance and Surveillance and Monitoring programs. The team may be present during an integrity dig of the pipeline's crossing of the Endicott Causeway, slated to occur during summer 2007. The lessee's 2007 annual report, due January 31, 2008, will also be reviewed.

6.5 Lease-Required Contact Information

The Endicott Pipeline lease requires the lessee to designate a registered agent, authorized representatives, and field representatives.

Registered Agent

Required by Lease Section 4(j)

CT Corporation, Re: BPTA
Suite 2002
9360 Glacier Highway
Juneau, Alaska 99801

Authorized Representative

Required by Lease Stipulation 1.3.2

Ken Konrad, President, BPTA
Michael Rocereta, Vice President, BPTA
William H. Clifton, Joint Venture Coordinator, BPTA
Glen Pomeroy, TAPS Performance Manager, BPTA
P.O. Box 190848
Anchorage, Alaska 99519-0848

Field Representative

Required by Lease Stipulation 1.3.2

Bruce W. Robinson or Thomas J. Barnes
Mail Stop END
BP Exploration (Alaska) Inc.
900 E. Benson Blvd.
Anchorage, AK 99508



Ravens take off from the Endicott Pipeline, March 22, 2007. Portions of the Endicott Pipeline and ROW pass through the Sagavanirktok River Delta. The Delta is home to a wide variety of bird species.

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7 Northstar Pipelines



The Northstar Pipelines connect man-made Northstar Island to Prudhoe Bay infrastructure. Northstar Island is approximately six miles offshore in State waters in the Beaufort Sea.

7.1 Right-of-Way Lease and Pipeline System Overview

<u>ADL and Lease Name</u>	<u>Lease Effective Date</u>	<u>Lease Expiration Date</u>	<u>Lessee</u>	<u>State Acreage</u>	<u>Survey Number</u>
415700 Northstar Oil Pipeline	October 1, 1999	September 30, 2019	BP Transportation Alaska, Inc. (BPTA)	2,111.14 acres construction ROW	EPF 2002-17 (not approved)
415975 Northstar Gas Pipeline	October 1, 1999	September 30, 2019	BPTA	150.92 acres construction ROW	EPF 2002-17 (not approved)
<u>ROW Lease Amendments</u>	<u>Event</u>	<u>Length</u>	<u>Description</u>	<u>State Acreage</u>	
November 12, 2002	Update to renewal clause	n/a	Updated both leases to reflect change in law to allow 30-year renewal period	No change	n/a

The Northstar Oil Pipeline originates at the Northstar Production Facility approximately six miles offshore in the Beaufort Sea and terminates at TAPS Pump Station 1. The pig launcher, mainline pumps, metering, and leak detection are located on Northstar Island. The Northstar Gas Pipeline transports natural gas from the Prudhoe Bay Central Compressor Plant to Northstar Island. Both pipelines are piggable.

For the six miles the pipelines are under the Beaufort Sea, they are bundled together. The pipelines cross the shore at Gwydyr Bay near Point Storkersen. The sub-sea pipelines employ a leak detection system called LEOS (Leck Erkennungs und Ortungs System) which is capable of sensing hydrocarbon vapors in case of a leak.

Currently, the pipeline ROW is in construction width to allow the lessee to use State lands necessary for pipeline construction. The construction ROW width varies between 440 and 1,725 feet with several staging areas. When the *ROW Release of Interest* process is completed, the operations ROW will be typically 200 feet wide on State land and comprise 419.13 acres for the Oil Pipeline and 405.51 acres for the gas pipeline, per survey EPF 2002-12, which has not been approved by the ADNR Surveys Section.

River Crossing: The Oil Pipeline crosses the Putuligayak (Put) River on a pipe bridge.

Quality Program: The SPC approved the BPTA Quality Program on December 21, 2004 (letter 04-101-WW). The lessee is responsible for complying with this program throughout all phases of construction, operations, maintenance, and termination.

Electronic copies of the Northstar Lease Agreements are available at the SPCO website: <http://www.jpo.doi.gov/SPCO/SPCO.htm>. Additional information about the leases and pipeline systems is contained in the FY07 SPCO annual report.

<u>Pipeline System</u>	<u>Diameter</u>	<u>Wall Thickness</u>	<u>Product</u>	<u>Year Built</u>	<u>System Length</u>
Northstar Oil Pipeline	10"	0.307" (0.594" sub-sea)	Sales quality crude oil	2000-2001	17 miles (all on State land)
Northstar Gas Pipeline	10"	0.307" (0.594" sub-sea)	Natural gas	2000-2001	16 miles (all on State land)

<u>Pipeline System</u>	<u>2006 Throughput</u>	<u>Maximum Operating Pressure</u>	<u>Maintenance Pigging</u>	<u>Last Smart Pig Run</u>	<u>Current Pipeline Operator</u>
Northstar Oil Pipeline	18,881,267 net barrels	1,480 psig at 100°F	Twice monthly	2006	BP Exploration Alaska (BPXA)
Northstar Gas Pipeline	29 billion cubic feet	1,480 psig	Twice yearly	2006	BPXA

7.2 Lessee's Annual Report

BPTA submitted a *2006 Surveillance and Monitoring Report* for the Badami, Endicott, Milne, and Northstar pipelines on February 26, 2007. BPTA requested an extension of the due date for annual reporting in order to compile more detailed reports this year. The SPC granted the extension.

7.2.1 SPCO Review

After thoroughly reviewing BPTA annual reports, the SPCO accepted them. BPTA was thanked for providing a thorough and detailed document that incorporated the comments from last year's review. The reports were greatly improved, allowing the compliance team to better set surveillance priorities. Surveillance reports 07-SPCO-S-018 and 019 document acceptance of the annual reports (letter 07-002-TG).

7.2.2 Lessee's Activities

Below is some information presented in the lessee's 2006 report:

Integrity Management Program: BPTA's USDOT Integrity Management Program, which had only applied to the Northstar Oil Pipeline, has been now been applied to other BPXA-operated crude oil sales pipelines on the North Slope that could affect a *high consequence area*. During November 13-17, 2006, subject matter experts gathered with operators, owners, and contractors for a comprehensive qualitative risk assessment for BPTA pipelines. Outside consultants developed hydraulic surge analysis, spill spread modeling, mapping, and geo-hazard identification. Preventive and mitigative measures were adopted and are being implemented in 2007 and onward. BPTA submitted detailed information for each pipeline in their 2006 report to the SPCO.

Heater: Norcon completed the Northstar Heater replacement-in-kind at Pump Station 1 in October 2006. It is necessary to warm up Northstar Oil prior to entering TAPS.

Northstar Island: Two passive thermosiphons were installed within the pipeline ROW near the wall of the seawater intake structure and pipeline vault to mitigate gravel subsidence and ensure the ground remains frozen.

Internal Safety Programs: Northstar employees formally monitor each other under the Safety Training Observation Program (STOP), and managers conduct Advanced Safety Audits (ASA). In 2006, Northstar employees generated 4,832 STOP observations and there were 557 ASA participants.

Guided Wave: As reported in 2005, BPTA was testing guided wave technology on the Northstar Oil Pipeline. Because of the geometry at the shore crossing with multiple bends and distance, BPTA reports that the technology is not appropriate at this time, and smart pigging will be still used for corrosion monitoring.

7.2.3 Lessee's Surveillance & Monitoring

The BPTA Surveillance & Monitoring Program, which applies to all BPTA-administered leases (Badami, Endicott, Milne and Northstar), requires the lessee to monitor conditions that could impact pipeline integrity, public health and safety, and the environment. The current program was approved by the SPC September 9, 2004 (letter 04-053-WW). A new draft program has been submitted to the SPCO for consideration, and is now being re-worked by BPTA after preliminary SPCO review. The new program should be submitted for approval in FY08.

In-Line Inspection: In August 2006, a combination metal loss/mapping ILI tool was run on both Northstar pipelines to identify metal loss from corrosion and assess strain from pipeline movement. Several dozen anomalies were reported on both pipelines, and BPTA reports that analysis of data from the pig supplier suggests these are most likely a result of pipe mill anomalies and not metal loss. Ten areas were identified as having experienced pipe movement within design limits.

ROW Surveillance: 74 visual aerial inspections occurred in 2006. Three overflights included FLIR assessments. The USDOT walking speed survey was completed March 8-9, 2006 utilizing walking and tracked vehicles. No anomalies were found.

USDOT Maintenance: The cathodic protection survey was conducted in September 2006. BPTA reports that jurisdictional equipment on the pipelines was inspected and maintained per regulatory requirements.

Ice Gouge and Strudel Scour: BPTA monitors the sub-sea Northstar ROW annually for strudel scours and ice gouging. In 2006, the bathymetric profile of the pipeline alignment resembled that from 2005, except that seven areas were altered by subsidence. Gravel was placed over three areas of the sub-sea ROW to maintain the required six feet of cover. Data indicated that scouring frequency matched the historical average in the 5,000-foot wide corridor surveyed in 2006, but severity was greater.

Thermistor Data: At the Northstar shore crossing, thermistor readings in 2006 indicated thaw bulb growth beyond the over excavated trench.

Shore Crossing Bluff Stability: The annual survey in July 2006 showed the surface of the pipeline backfill on the bluff has reached the elevation of native tundra prior to pipeline installation. The survey indicated no recession of the backfill bluff at the pipeline crossing due to a lack of westerly storms during the open water period.

7.3 SPCO Activities

7.3.1 Lease Administration

The lease administration team received and initiated review of a request to transfer the Northstar leases to Northstar Pipeline Company (NPC), a limited liability company. The Regulatory Commission of Alaska (RCA) approved a transfer of interests in the Northstar pipelines from BPTA to NPC LLC. Ownership of NPC is reflective of ownership in the Northstar Unit, with Murphy Exploration Incorporated owning the 1.4228% minority interest in Northstar.

7.3.2 Compliance Oversight

During FY07, the compliance oversight team conducted two field surveillances of the Northstar pipelines to review State lands in the construction ROW and transition stabilization and revegetation at the Point Storkersen shore crossing. During FY07, 17 surveillance reports were signed related to a corrosion review from FY06, the two FY07 field trips, and SPCO review of the lessee's 2006 annual report. Please note that some surveillance reports were issued under an old numbering system.

Corrosion: An SPCO surveillant and two State engineers met with BPXA and BPTA representatives to discuss corrosion on BPTA pipelines. This FY06 surveillance is reported on in last year's annual report. The surveillance reports ANC-06-S-114 and 115 were not finalized until FY07 so they appear in this year's tally (letter 06-206-WW).

7.3.3 Summary of FY07 Field Surveillance

July 31 – August 4, 2006 ROW Release of Interests: The compliance team lead reviewed State lands in the Northstar Pipelines construction ROW to see if they were in adequate condition to be released per the *ROW Release of Interests Process*. The review included flying the entire pipeline ROW. Due to weather, the surveillant was unable to reach Northstar Island. The ADEC spills database was also queried to search for hazardous substances discharges on State lands to be released. The ROW release was not completed in FY07 because several outstanding issues remain, including the IN complete as-built survey for the Northstar Gas Pipeline and some remaining state lands to be reviewed including construction and access staging areas. Surveillance reports 06-SPCO-S-051 through 056 document the surveillance (letter 06-304-WW).

August 19, 2006: The compliance team conducted surveillance of the Northstar shore crossing near Point Storkersen. Field work included aerial and ground-based surveillance of the pipelines and revegetation at the transition. Surveillance reports 06-SPCO-S-018 through 023 document the surveillance (letter 06-269-WW). Two minor unsatisfactory reports were related to cables hanging below the pipelines. The Northstar leases require that cables not hang below the pipeline at any location. BPTA provided photographic evidence that the cables were secured.

7.3.4 Summary of SPCO Surveillance Reports Signed in FY07

<u>Lease</u>	<u>Field Trip Date</u>	<u>Date Signed</u>	<u>Stipulation</u>	<u>Description</u>	<u>Report #</u>	<u>Finding</u>
Oil	6/1/2006	8/4/2006	1.6.1 (4)	SMP: corrosion	ANC-06-S-114	SAT
Oil	6/1/2006	8/4/2006	3.2.1	Corrosion detection	ANC-06-S-115	SAT
Oil	8/18/2006	9/27/2006	Sec. 7	Public access	06-SPCO-S-018	SAT
Oil	8/18/2006	9/27/2006	1.5.2	Cables below pipe	06-SPCO-S-019	UNSAT
Oil	8/18/2006	9/27/2006	2.10	Stabilize, restore, revegetate	06-SPCO-S-020	SAT
Gas	8/18/2006	9/27/2006	Sec. 7	Public access	06-SPCO-S-021	SAT
Gas	8/18/2006	9/27/2006	1.5.2	Cables below pipe	06-SPCO-S-022	UNSAT
Gas	8/18/2006	9/27/2006	2.10	Stabilize, restore, revegetate	06-SPCO-S-023	SAT
Oil	7/31/2006	11/30/2006	Sec. 14(a)	QA Program	06-SPCO-S-051	SAT
Oil	7/31/2006	11/30/2006	Sec. 16(a)	Environmental compliance	06-SPCO-S-052	SAT
Oil	7/31/2006	11/30/2006	2.11.1	Spill Reporting	06-SPCO-S-053	SAT
Gas	7/31/2006	11/30/2006	Sec. 14(a)	QA Program	06-SPCO-S-054	SAT
Gas	7/31/2006	11/30/2006	Sec. 16(a)	Environmental compliance	06-SPCO-S-055	SAT
Gas	7/31/2006	11/30/2006	2.11.1	Spill Reporting	06-SPCO-S-056	SAT
Oil	n/a	4/9/2007	1.14.1	Annual reporting	07-SPCO-S-018	SAT
Gas	n/a	4/9/2007	1.14.1	Annual reporting	07-SPCO-S-019	SAT

7.3.5 Appraisals

<u>Northstar pipelines</u>	<u>ADL #</u>	<u>State Acres</u>	<u>Rental</u>	<u>Next Appraisal Due</u>
Oil Pipeline Construction ROW	415700	2,111.14	\$409,796	October 1, 2009
Gas Pipeline Construction ROW	415975	150.92	\$55,980	October 1, 2009



Left: Aerial view of the Northstar shore crossing landfall at Point Storkersen, the point where the pipelines transition between buried sub-sea and supported above-ground. The visible module houses a remotely-operated valve. **Right:** close-up of naturally eroding bluff near the pipelines' shore crossing. The lessee conducts an annual bluff stability survey.

7.4 Upcoming Issues

7.4.1 Lessee's Activities

During 2007, the lessee plans to continue surveillance and monitoring activities including thermistor readings, annual ground survey, smart pig verification, cathodic protection survey, strudel scour and ice gouge bathymetry survey, and a USDOT Integrity Management Risk Assessment Review of the sales oil pipeline.

7.4.2 SPCO Activities

The lease administration team, in conjunction with the compliance oversight team, will continue to review as-built surveys to follow-up with the *ROW Release of Interests* process. The Record of Survey for the Northstar Pipelines, EPF 2002-0017, was approved by the Statewide Platting Supervisor on behalf of the DNR Commissioner on August 12, 2004, and reflects the operations right-of-way.

FY08 surveillance will focus on Quality Assurance and Surveillance and Monitoring programs. Additionally, the compliance oversight team plans to look at the Northstar Heater, part of the Northstar Oil Pipeline system, and review maintenance pigging practices. The compliance oversight team also plans to further review State lands in the construction ROW which will be released through the *Release of Interests* process. The Other issues identified in FY07 including wind induced vibration and pipeline supports at the Point Storkersen shore crossing will continue to be followed until closure. The lessee's 2007 annual report, due January 31, 2008, will be reviewed.

7.5 Lease-Required Contact Information

The Northstar Pipeline leases require the lessee to designate in writing field representatives, authorized agents, and a registered agent.

Registered Agent

Required by Lease Section 8(j)

CT Corporation
Re: BPTA
Suite 2002
9360 Glacier Highway
Juneau, Alaska 99801

Authorized Representative

Required by Lease Section 30

Ken Konrad, President, BPTA
Michael Rocereta, Vice President, BPTA
William H. Clifton, Joint Venture Coordinator, BPTA
Glen Pomeroy, TAPS Performance Manager, BPTA
BP Transportation (Alaska) Inc.
P.O. Box 190848
Anchorage, Alaska 99519-0848

Field Representative

Required by Lease Section 30

Wayne E. Kuykendall or Gary D. Herring
Mail Stop Northstar
900 E. Benson Blvd.
Anchorage, AK 99508

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8 Milne Point Pipelines



The Milne Point Pipelines connect the Milne Point Development (Central Facilities Pad pictured above) to the Kuparuk and Oliktok Pipelines.

8.1 Right-of-Way Lease and Pipeline System Overview

<u>ADL and Lease Name</u>	<u>Lease Effective Date</u>	<u>Lease Expiration Date</u>	<u>Lessee</u>	<u>State Acreage</u>	<u>Survey Number</u>
410221 Milne Point Pipeline	January 15, 1985	May 2, 2034	Milne Point Pipeline Company (MPPC) (wholly owned by BPTA)	186.92 acres construction ROW	ASLS 84-114
416172 Milne Point Products Pipeline	December 5, 2000	December 4, 2030	MPPC	258.6 acres construction ROW	None submitted

<u>ROW Lease Amendments</u>	<u>Event</u>	<u>Length</u>	<u>Description</u>	<u>State Acreage</u>	<u>Survey Number</u>
December 28, 2002 (Oil)	Update to renewal clause	n/a	Updated oil lease to reflect change in law to allow 30-year renewal period	No change	n/a
November 12, 2002 (Products)	Update to renewal clause	n/a	Updated lease to reflect change in law to allow 30-year renewal period	No change	n/a
November 26, 2002 (Oil)	30-year renewal	n/a	Renewed oil pipeline lease for another 30 years	No change	n/a

The Milne Point Pipeline (MPPL) was built in 1984-85 to transport sales quality crude oil from the Milne Point Unit to the Kuparuk Pipeline. The pipeline begins at Milne Point Central Facilities Pad (CFP) Module 58 and ends 10 miles south at a tie-in point with the Kuparuk Pipeline after crossing Spine Road. On the north side of Spine Road, the piggable section of the MPPL ends at Module 68, where the pig receiver, metering, and

leak detection equipment are located. Most of the MPPL is above-ground and piggable. BPTA uses smart pigs to check pipeline conditions and maintenance pigs to clean the pipeline. The unpiggable section of the MPPL is scheduled to be replaced in summer 2007 with corrosion-resistant duplex stainless steel.

The Milne Point Products Pipeline, also known as the Kuparuk Enhanced Oil Recovery (KEOR) Pipeline, was built in 2000 on the same supports as the MPPL to transport natural gas liquids from the Oliktok Pipeline to Milne CFP to be used in enhanced oil recovery. The pipeline was temporarily out of service in 2002 for economic reasons. In 2006, BPTA proposed to "abandon" the KEOR pipeline. It was physically disconnected from the OPL and taken out of service, reducing maintenance and surveillance requirements from USDOT. The State ROW lease, however, still applies unless the pipeline lease is terminated under the lease's termination requirements. MPPC submitted a plan to the SPCO to discontinue service of the pipeline due to a lack of shippers. In December 2006 and January 2007, work was completed to isolate the pipeline, which is currently charged with a nitrogen blanket.

Currently, the MPPL ROW is in operational width, approximately 150 feet wide. The Milne Point Products Pipelines ROW is still in construction width, varying from 185 to 800 feet. Though construction has been completed, an as-built survey has not yet been received by the SPCO, so the *ROW Release of Interest* process has not begun.

Quality Program: The SPC approved the MPPC Quality Program on December 21, 2004 (letter 04-101-WW). The lessee is responsible for complying with this program throughout all phases of construction, operations, maintenance, and termination.

Electronic copies of the Lease Agreements are available at the SPCO website: <http://www.jpo.doi.gov/SPCO/SPCO.htm>. Additional information about the leases and pipeline systems is contained in last year's SPCO report.

<u>Pipeline System</u>	<u>Diameter</u>	<u>Wall Thickness</u>	<u>Product</u>	<u>Year Built</u>	<u>System Length</u>
MPPL	14"	0.312"	Sales-quality crude oil	1984-1985	10 miles (all on State land)
KEOR	8"	0.277"	Natural gas liquids	2000	10 miles (all on State land)

<u>Pipeline System</u>	<u>2006 Throughput</u>	<u>Maximum Operating Pressure</u>	<u>Maintenance Piggings</u>	<u>Last Smart Pig Run</u>	<u>Current Pipeline Operator</u>
MPPL	13,290,709 net barrels	1,350 psig	Quarterly	2005	BP Exploration Alaska (BPXA)
KEOR	Not in service	Not in service	Not in service	n/a	BPXA

8.2 Lessee's Annual Report

BPTA submitted a *2006 Surveillance and Monitoring Report* for the Badami, Endicott, Milne, and Northstar pipelines on behalf of the lessees on February 26, 2007. BPTA requested an extension of the due date for annual reporting in order to compile more detailed reports this year. The SPC granted the extension.

8.2.1 SPCO Review

After thoroughly reviewing BPTA annual reports, the SPCO accepted them. BPTA was thanked for providing a thorough and detailed document that incorporated comments from last year's review. The reports were greatly improved, allowing the compliance team to better set surveillance priorities. Surveillance reports 07-SPCO-S-016 and 017 document acceptance of the annual reports (letter 07-002-TG).

8.2.2 Lessee's Activities

Below is some information presented in the lessee's 2006 report:

Integrity Management Program: BPTA's USDOT Integrity Management Program, which had only applied to the Northstar Oil Pipeline, has now been applied to other BPXA-operated crude oil sales pipelines on the North Slope that could affect a *high consequence area*. During November 13-17, 2006, subject matter experts gathered with operators, owners, and contractors for a comprehensive qualitative risk assessment for BPTA pipelines. Outside consultants developed hydraulic surge analysis, spill spread modeling, mapping, and geo-hazard identification. Preventive and mitigative measures were adopted and are being implemented in 2007 and onward. BPTA submitted detailed information for each pipeline in their 2006 report to the SPCO.

Internal Safety Program: Milne Point employees participate in BP's internal safety programs, formally monitoring each other under the Behavior Enhanced Safety Techniques (BEST) program. In 2006, Milne Point employees generated 1,321 BEST observations and managers conducted 2,814 Advanced Safety Audits.

8.2.3 Lessee's Surveillance & Monitoring

The BPTA Surveillance & Monitoring Program, which applies to all BPTA-administered leases (Badami, Endicott, Milne, and Northstar), requires the pipeline operator to monitor conditions that could impact pipeline integrity, public health and safety, and the environment. The lessee is required to implement the program during pipeline operations and maintenance. The current program was approved by the SPC September 9, 2004 (letter 04-053-WW). A new draft program has been submitted to the SPCO for consideration, and is now being re-worked by BPTA after preliminary SPCO review. The new program should be submitted for approval in FY08.

ROW Surveillance: Milne Point Security conducted 34 drive-by inspections of the ROW in 2006. In response to leak detection alarms or communication losses, the Control Room operators requested an additional 78 drive-by inspections. The annual

ground survey was conducted November 18-22, 2006. Of the 41 MPPL observations noted, 32 were insulation and jacket removal areas from ILI verification inspections. Other issues were minor insulation jacket perforations, broken dampeners, and a missing saddle banding strap. Two sheet metal perforations were noted on the KEOR.

Smart Pig Verification: Initially, data from the 2005 ILI run indicated internal corrosion, however, BPTA reports that "this was determined to be a mistake in the supplier's analysis of the data. Having resolved the concerns and reporting error of internal corrosion, by mid-year, external corrosion verification and mitigation became the primary activities for the later part of the year." Inspections indicated that three locations needed sleeve repairs as a result of external corrosion around the circumference of the pipe. All three sleeves were installed in spring 2007.

8.3 SPCO Activities

8.3.1 Lease Administration

The lease administration team reviewed BPTA's proposal to discontinue service of the Milne Point Products Pipeline. SPCO letter 06-325-WW on December 13, 2006 approved the temporary discontinuance of service. The Milne Point Products Pipeline was de-inventoried, cleaned, and isolated from the Oliktok Pipeline, then pressurized with a nitrogen blanket. The Milne Point Products Pipeline had no shippers in 2006 and has been in a warm shutdown status since 2002. BPTA does not anticipate any shippers using the pipeline in the near future.

8.3.2 Compliance Oversight

In FY07, 11 surveillance reports were signed for the Milne Point Pipelines related to one field trip from FY06, two field trips in FY07, and SPCO review of the lessee's annual report. Seven surveillance reports were for the MPPL, and four were for the KEOR.

Corrosion: An SPCO surveillant and two State engineers met with BPXA and BPTA representatives to discuss corrosion on BPTA pipelines. This surveillance activity occurred in FY06 and is reported on in last year's annual report. The surveillance reports ANC-06-S-112 and 113 were not finalized until FY07 so they appear in this year's tally (letter 06-206-WW). The large number of features found in the 2005 pigging was not anticipated. While some external corrosion was expected, the internal corrosion (over half of the anomalies identified) was not. In their annual reporting, BPTA has indicated they believe these internal corrosion anomalies were reported in error.

8.3.3 Summary of FY07 Field Surveillance

July 18, 2006: Incidental to observations of another pipeline ROW, the compliance team visited the tie-in location at the Spine Road and Milne Point Road intersection to verify that a metal sign had been placed on the KEOR/OPL valve as described by MPPC (for background, please see last year's SPCO report). Some tripping hazards

were noted on the valve platform, including a large metal object at the top of the stairway. These hazards had been pointed out before in ANC-06-S-038 and letter 06-162-WW, so they were written up as a repeat unsatisfactory condition for both pipelines (letter 06-201-WW). MPPC responded on September 5, 2006, providing evidence that the hazards had been removed. However, letter 06-243-WW responded that the MPPC submittal had not completely met the requirements of 06-201-WW. A supplementary response including the required information was received on September 15, 2006. Reports 06-SPCO-S-024 and 025 document the issues are closed (letter 06-271-WW).

Milne Point Quarterly Meetings May 10 and 24, 2006: The compliance team conducted surveillance by attending, as observers, the first Milne Point Quarterly Meeting. The same meeting was held on two different occasions in order to accommodate employees' alternate work schedules at Milne Point. Representatives from BPTA, BPXA, and MPPC, and a contractor from Hoefler Consulting Group participated. Much of the discussion focused on how to better compile information needed for agencies and to increase the speed of the "continuous improvement" cycle by updating quarterly rather than annually. The results of this surveillance were reported as satisfactory in 07-SPCO-S-043 through 045 (letter 07-057-WW).

8.3.4 Summary of SPCO Surveillance Reports Signed in FY07

<u>Lease</u>	<u>Field Trip Date</u>	<u>Date Signed</u>	<u>Stipulation</u>	<u>Description</u>	<u>Report #</u>	<u>Finding</u>
MPPL	7/18/2006	7/26/2006	1.11.1	Health and Safety	ANC-06-S-143	UNSAT
KEOR	7/18/2006	7/26/2006	1.4.1	Quality Program	ANC-06-S-144	UNSAT
MPPL	6/1/2006	8/4/2006	1.10.1 (4)	SMP: corrosion	ANC-06-S-112	SAT
MPPL	6/1/2006	8/4/2006	3.4.1 (6)	Early detection of corrosion	ANC-06-S-113	SAT
MPPL	n/a	9/20/2006	1.11.1	Health and Safety	06-SPCO-S-024	SAT
KEOR	n/a	9/20/2006	1.4.1	Quality Program	06-SPCO-S-025	SAT
MPPL	n/a	4/9/2007	1.3.1	Annual reporting	07-SPCO-S-018	SAT
KEOR	n/a	4/9/2007	1.13.1	Annual reporting	07-SPCO-S-019	SAT
MPPL	5/24/2006	6/19/2007	1.4.1	Communications	07-SPCO-S-043	SAT
MPPL	5/24/2006	6/19/2007	1.8.2 (5)	Quality Assurance	07-SPCO-S-044	SAT
KEOR	5/24/2006	6/19/2007	1.2.1	Communications	07-SPCO-S-045	SAT

8.3.5 Appraisals

<u>Milne Point pipelines</u>	<u>ADL #</u>	<u>State Acres</u>	<u>Rental</u>	<u>Next Appraisal Due</u>
Oil Operations ROW	410221	186.92	\$37,384	January 15, 2008
Products Construction ROW	416172	258.6	\$32,500	December 1, 2005 (overdue)

8.4 Upcoming Issues

8.4.1 Lessee's Activities

During 2007, BPTA plans several major upgrades to the Milne Point Pipelines. The most important project is the replacement of approximately 660 feet of non-piggable pipeline between the pig receiver at Module 68 and the Kuparuk Pipeline tie-in. At this location, the MPPL crosses Spine Road. Due to the importance of this road, excavating to inspect the buried pipe at the road crossing is logistically difficult. In order to avoid future integrity digs and reduce the risk from this non-piggable section of pipe, BPTA is installing 12" corrosion-resistant duplex stainless steel pipe in late summer 2007.

8.4.2 SPCO Activities

The lease compliance oversight team plans to conduct field surveillance of the Milne Point pipelines during FY08. Surveillance will focus on Quality Assurance and Surveillance and Monitoring programs. Additionally, the compliance oversight team plans to conduct surveillance related to the duplex stainless pipe replacement project for the MPPL. The compliance team plans to conduct surveillance of pipe fabrication at Flowline in Fairbanks and view selected aspects of installation in the field. Issues identified in FY07 will continue to be followed until closure. The lessee's 2007 annual report, due January 31, 2008, will be reviewed.

8.5 Lease-Required Contact Information

The Milne Point Pipeline leases require the lessee to designate in writing field representatives, authorized agents, and a registered agent.

Registered Agent

*Required by MPPL Lease Section 4(j) and
KEOR Lease Section 8(j)*

CT Corporation, Re: BPTA
9360 Glacier Highway Suite 2002
Juneau, Alaska 99801

Authorized Representative

*Required by MPPL Lease Stipulation 1.3.2
and KEOR Lease Section 30*

Ken Konrad, President, BPTA
Michael Rocereta, Vice President, BPTA
William H. Clifton, Joint Venture Coordinator, BPTA
Glen Pomeroy, TAPS Performance Manager, BPTA
BP Transportation (Alaska) Inc.
P.O. Box 190848
Anchorage, Alaska 99519-0848

Field Representative

*Required by MPPL Lease Stipulation 1.3.2
and KEOR Lease Section 30*

Dale O. Kruger or Jeff R. Michels
Mail Stop MPU
900 E. Benson Blvd.
Anchorage, AK 99508

9 Nuiqsut Natural Gas Pipeline



The above-ground portion of the Nuiqsut Natural Gas Pipeline (yellow) is located on the same horizontal and vertical supports as the Alpine Pipelines west of the Colville River. Where the Alpine Pipelines cross the Colville River, the NNGP diverges and continues, buried, to Nuiqsut.

9.1 Right-of-Way Lease and Pipeline System Overview

<u>ADL and Lease Name</u>	<u>Lease Effective Date</u>	<u>Lease Expiration Date</u>	<u>Lessee</u>	<u>State Acreage</u>	<u>Survey</u>
416202 Nuiqsut Natural Gas Pipeline	March 15, 1999	March 14, 2019	North Slope Borough (NSB)	17.67 acres operations ROW	As-built survey approved by DNR December 17, 2003

The Nuiqsut Natural Gas Pipeline (NNGP) was built by the North Slope Borough to transport natural gas from the Alpine Development to the village of Nuiqsut in the Colville River Delta. Though construction has been completed for some time, the pipeline is not yet operational. The 14.4-mile NNGP shares horizontal and vertical supports with the Alpine Pipelines from the Alpine Development to the west bank of the Colville River. There, the NNGP transitions to below-ground and continues buried to the village. Only 2.4 miles of the NNGP are located on State land in the above-ground ROW and at the trenched Nechelik Channel crossing.

The NNGP was built with continuous electric resistance welded coil tubing that was factory-coated externally. A continuous magnesium strip cathodic protection system is installed on the below-ground portion. The diameter of the pipe is too small for in-line inspection (smart pig) technology. The NNGP system is more thoroughly described in last year's SPCO report.

The Nuiqsut Natural Gas Pipeline as-built survey was approved by ADNR on December 17, 2003. The width is approximately 50 feet above-ground and approximately 200 feet at the river crossing, though the pipeline is not yet operating.

River Crossings: The NNGP was trenched under the Nechelik Channel of the Colville River.

Quality Program: The SPC approved the NNGP Quality Assurance Program on March 10, 1999 (letter 99-033-MC). It has not been amended since the original lease was issued. A revised draft Quality Program was submitted to the SPCO May 14, 2007, and is currently under review. The lessee is responsible for complying with this program throughout all phases of construction, operations, maintenance, and termination.

An electronic copy of the NNGP Lease Agreement is available at the SPCO website: <http://www.jpo.doi.gov/SPCO/SPCO.htm>. Additional information about the ROW Lease Agreement and pipeline system is contained in last year's SPCO report.

<u>Pipeline System</u>	<u>Diameter</u>	<u>Wall Thickness</u>	<u>Product</u>	<u>Year Built</u>	<u>System Length</u>
NNGP	3.5"	0.203"	Natural Gas	1998-1999	14.4 miles (2.4 miles on State land)
<u>Pipeline System</u>	<u>2006 Throughput</u>	<u>Maximum Operating Pressure</u>	<u>Maintenance Pigging</u>	<u>Last Smart Pig Run</u>	<u>Current Pipeline Operator</u>
NNGP	Not in service	Not in service	Not in service	n/a	Not in service

9.2 Lessee's Annual Report

A contractor for the NSB submitted a draft annual report during April 2007, but the NSB did not formally submit a 2006 Annual Report during FY07

9.2.1 SPCO Review

The NSB has not yet formally submitted a 2006 Annual Report. SPCO Surveillance Report 07-SPCO-S-029 documented the lessee was out of compliance with Stipulation 1.14.1, and a new due date of April 30, 2007 was required for submittal of the annual report (letter 07-051-WW). A contractor submitted a draft report in April 2007 indicating that a formal submittal would follow, but as of July 31, 2007, none has.

9.2.2 Lessee's Activities

The NSB has not yet submitted their 2006 annual report.

9.2.3 Lessee's Surveillance & Monitoring

The NSB has not yet submitted a Surveillance and Monitoring Program to the SPCO, despite numerous written requests for a draft program. A program must be approved

prior to natural gas being transported in the pipeline. Since no program exists, the NSB has reported that no surveillance and monitoring activities took place in 2006. However, incidental monitoring has occurred, such as that which resulted in the March 2007 pipe replacement project. For information, please see below.

9.3 SPCO Activities

9.3.1 Lease Administration

In FY07, the NNGP was in need of repair at the Nechelik Channel crossing on State land in the navigable waterway. An empty fiber optic conduit had been observed floating in the channel and the pipeline was also seen exposed. Channel migration within the floodplain had reduced the depth of cover below design limits so a new string of pipe was to be installed adjacent to the existing pipe within the ROW.

As required by Lease Section 14 and Stipulation 1.3.1, the NSB submitted the *DRAFT Nuiqsut Natural Gas Pipeline Channel Crossing Repair Construction Plans in Support of Right-of-Way Lease (Plan)* for SPCO review dated March 6, 2007. In letter 07-042-WW on March 22, 2007, the SPCO provided comments on the draft. This letter included twelve numbered requests, and also asked the NSB to provide one week's notice prior to mobilization to allow the compliance team time to schedule surveillance. The letter also stated, "Please be aware that this is not the final approval of this plan, and an approved plan must be in place before commencement of the scheduled repair work." Contrary to this statement and to the Lease, the NSB began and largely completed work before the plan was approved. Many of the requests in 07-042-WW were also not answered. This is further discussed in the Compliance Oversight section.



Repair work at the Nechelik Channel was ongoing in March and April 2007. In this photo, from foreground to background: red tape marks the edge of an excavated bell hole where the new string of pipe will be welded onto the existing pipeline ("tie-in"). Ice excavated from the hole is piled to the right. Temporary wooden pipe supports have been built and the new pipe will be laid on them during fabrication. Snow removal continues in the background.



The NNGP is pictured here in the shared ROW with the Alpine pipelines (left) just north of the Alpine HDD site on the west side of the Colville River. As reported in letter 07-051-WW, the NNGP has suffered coating damage in some locations where pipe movement across the horizontal support appears to have scraped off coating. The wooden structure attached to the NNGP in the background of the photo is a vibration dampener.

9.3.2 Compliance Oversight

During FY07, 14 surveillance reports were signed related to past due submissions from the NSB and to one field trip.

9.3.3 Summary of FY07 Field Surveillance

August 16, 2006: As an in-house surveillance, the SPCO submitted surveillance reports 06-SPCO-S-001 and 002 to the NSB to document non-compliance with Lease Section 13, which requires the NNGP to begin operations within five years of the effective date of the lease, 2004. One extension was issued, though this lapsed in 2005, and the lessee still has not requested an additional extension (letter 07-051-WW). Surveillance Report 07-SPCO-S-021 on April 11, 2007 re-affirmed that the NSB has still not requested an additional extension or begun operations as a common carrier.

March 30-31, 2007: Before the NSB had submitted a final construction plan for approval incorporating the information requested in letter 07-042-WW, the compliance team learned that work was beginning on the repair. A field trip was scheduled during the time that the contractor anticipated welding would occur. Due to a delay in receiving the welding procedures and qualifications from testing, welding did not actually occur during the surveillance. Since the Plan was not yet approved at the time, the surveillant compared field conditions to the draft Plan and to various State permits including Fish

Habitat Permit FG98-II-0257 (Amendment #3), Land Use Permit LAS 26261, and Temporary Water Use Authorization #A2007-15. Contrary to LAS 26261 Stipulation 10(b), refueling of equipment appeared to have occurred within the Nechelik Channel floodplain. This information was forwarded to the ADNR Northern Region Office for follow-up. Four of the twelve surveillance reports issued for this field trip described unsatisfactory conditions. Beginning work prior to approval of the Construction Plan was considered a Significant Unsatisfactory Condition (letter 07-051-WW). The Surveillance Field Notes attached to 07-SPCO-S-020 describe the repair work in detail and contain pictures, including several locations of coating damage on the above-ground pipe where pipeline movement on horizontal supports appears to have scraped off coating. These pictures were forwarded to USDOT. Follow-up to these and other compliance issues will continue in FY08. On April 20, 2007, after the repair work was mostly completed, the SPCO approved the Construction Plan (letter 07-005-TG).

Hydraulic Fluid Spill: During the Nechelik Channel site visit on March 31, 2007, the surveillant observed plastic bags filled with dirty snow on containment behind a container at the work site. She was told the bags were oily waste from clean-up of a small hydraulic fluid spill from a broken-down Cat 235 excavator on the frozen channel on March 28. The spill occurred within the navigable waterway floodplain but had not been reported to any agencies at that time. On April 3, an NSB contractor agreed, via email, to report the spill of less than one gallon to ADEC as required by the ROW Lease Stipulation 2.11.1. Surveillance Report 07-SPCO-S-031 addresses the spill.

9.3.4 Summary of SPCO Surveillance Reports Signed in FY07

<u>Field Trip Date</u>	<u>Date Signed</u>	<u>Stipulation</u>	<u>Description</u>	<u>Report #</u>	<u>Finding</u>
n/a	8/16/2006	Section 13	Timely construction and operations	06-SPCO-S-001	UNSAT
n/a	8/16/2006	1.14.1	Annual reporting	06-SPCO-S-002	UNSAT
3/30/2007	4/11/2007	Section 6	State's right of access	07-SPCO-S-020	SAT
3/30/2007	4/11/2007	Section 13	Timely construction and operations	07-SPCO-S-021	UNSAT
3/30/2007	4/11/2007	Sec. 14(a) and (d)	Construction plan	07-SPCO-S-022	UNSAT
3/30/2007	4/11/2007	Section 32	Alaska hire	07-SPCO-S-023	SAT
3/30/2007	4/11/2007	1.3.1	Construction Plan	07-SPCO-S-024	UNSAT
3/30/2007	4/11/2007	1.5.2	Vibration dampeners	07-SPCO-S-025	SAT
3/30/2007	4/11/2007	1.8.1	Survey monuments	07-SPCO-S-026	SAT
3/30/2007	4/11/2007	1.13.1	Storage on approval	07-SPCO-S-027	SAT
3/30/2007	4/11/2007	2.3.1.1.1	Ice roads	07-SPCO-S-028	SAT
3/30/2007	4/11/2007	1.14.1	Annual reporting	07-SPCO-S-029	UNSAT
3/30/2007	4/11/2007	2.6.	Animal passage	07-SPCO-S-030	SAT
3/30/2007	4/11/2007	2.11	Spill reporting	07-SPCO-S-031	SAT

9.3.5 Appraisals

<u>Nuiqsut Natural Gas Pipeline</u>	<u>ADL #</u>	<u>State Acres</u>	<u>Rental</u>	<u>Next Appraisal Due</u>
Gas Pipeline Operations ROW	416202	17.67	\$2,468	March 15, 2009

9.4 Upcoming Issues

9.4.1 Lessee's Activities

During 2007, the NSB plans to commission the NNGP and distribution system. Start-up has been planned for several years now and it is unclear when start-up will occur. The Regulatory Commission of Alaska has a docket open on the NNGP and a hearing occurred June 20, 2007.

9.4.2 SPCO Activities

The lease compliance oversight team plans to conduct field surveillance of the NNGP during start-up operations. Surveillance may also focus on the Quality Assurance Program and the Surveillance and Monitoring Program, when one is submitted. When the lessee's 2006 annual report is formally submitted, it will be reviewed. The lessee's 2007 annual report, due January 31, 2008, will also be reviewed.

9.5 Lease-Required Contact Information

The NNGP ROW lease requires the lessee to designate in writing a registered agent, authorized representative, and field representative. The NSB updated these contacts on April 12, 2007.

Registered Agent*Required by Lease Section 8(j)*

Marvin Olson, Director
North Slope Borough Department of Public Works
Box 350
Barrow, AK 99723

Authorized Representative*Required by Lease Section 30*

North Slope Borough Mayor
The Honorable Edward Sagaan Itta
Box 69
Barrow, AK 99723

Field Representative*Required by Lease Section 30*

Marvin Olson, Director
North Slope Borough Department of Public Works
Box 350
Barrow, AK 99723

APPENDICES

Appendix A – Table of Acronyms

AAC	Alaska Administrative Code
ADEC	Alaska Department of Environmental Conservation
ADF&G	Alaska Department of Fish & Game
ADNR	Alaska Department of Natural Resources
AS	Alaska Statute
ASA	Advanced Safety Audit (a BP internal safety program)
ASLS	Alaska State Land Survey
BEST	Behavior Enhanced Safety Techniques (a BP internal safety program)
BLM	US Bureau of Land Management
BPTA	BP Transportation (Alaska) Inc.
BPXA	BP Exploration (Alaska) Inc.
CFP	Central Facilities Pad (Milne)
COTU	Crude Oil Topping Unit (also known as Crude Oil Topping Plant)
CPAI	ConocoPhillips Alaska Inc.
CPC	ConocoPhillips Company
CPF	Central Processing Facility
DOTPF	Alaska Department of Transportation & Public Facilities
EPF	Engineering Plat File (record of survey)
FLIR	Forward-looking Infrared
FS	Flow Station
FY	Fiscal Year
HDD	Horizontal Directional Drilling
HSM	Horizontal Support Member
ILI	In-line Inspection (also known as "smart pigging")
IMP	Integrity Management Program or Plan (per USDOT)
JPO	Joint Pipeline Office
KEOR	Kuparuk Enhanced Oil Recovery (Milne Point Products Pipeline)
KKPL	Kenai Kachemak Pipeline
KKPL LLC	Kenai Kachemak Pipeline Limited Liability Company
KPC	Kuparuk Pipeline Company
KPL	Kuparuk Pipeline

KPL X	Kuparuk Pipeline Extension
KTC	Kuparuk Transportation Company
MPPC	Milne Point Pipeline Company (wholly owned by BPTA)
MPPL	Milne Point Pipeline
NGL	Natural Gas Liquids
NNGP	Nuiqsut Natural Gas Pipeline
NSB	North Slope Borough
OMB	Office of Management and Budget
OHMP	ADNR Office of Habitat Management and Permitting
OPC	Oliktok Pipeline Company
OPL	Oliktok Pipeline
ORCA	Observing Risks, Changes, and Attitudes (a BP internal safety program)
OSHA	Occupational Safety and Health Administration
Plan	See context
PSM	Process Safety Management
psig	Pounds per square inch gauged
QA	Quality Assurance
ROW	Right-of-Way
RTU	Remote Terminal Unit
SAT	Abbreviation for a "satisfactory" condition on a surveillance report
SMP	Surveillance and Monitoring Program or Plan
SPC	State Pipeline Coordinator
SPCO	State Pipeline Coordinator's Office
STOP	Safety Training Observation Program (a BP internal safety program)
TAPL	Tesoro Alaska Pipeline (Nikiski Alaska Pipeline)
TAPS	Trans-Alaska Pipeline System
Tesoro	Tesoro Alaska Pipeline Company
UNSAT	Abbreviation for an "unsatisfactory" condition on a surveillance report
USACE	US Army Corps of Engineers
USDOT	US Department of Transportation (usually Office of Pipeline Safety)
VSM	Vertical Support Member

Appendix B – Annual Reporting Requirements for ROW Lessees

In addition to lease-specific requirements, the SPC has required each lessee to provide an annual comprehensive report that includes, at a minimum:

1. The results of the lessee's surveillance & monitoring program during the preceding year, including annual and cumulative changes in facilities and operations, the effects of the changes, and proposed actions to be taken as a result of the noted changes:

- *Provide a summary of the scope of all surveillances, audits, self-assessments or other internal evaluations performed by the lessee.*

- *Summarize findings, action items and other observations identified as a result of all surveillances, audits, self-assessments or other internal evaluations performed by the lessee.*

- *Describe corrective and preventative actions planned or implemented as a result of surveillances, audits, self-assessments or other internal evaluations performed by the lessee.*

- *To the extent known, list by quarter, those surveillances, audits, self-assessments or other internal evaluations planned for next year.*

2. The state of, changes to, and results from the last year of the lessee's risk management program, Quality Assurance Program, and internal and external safety programs.

3. Lessee's performance under the right-of-way lease, including stipulations.

4. Information on construction, operations, maintenance, and termination activities necessary to provide a complete and accurate representation of the lessee's activities and the state of the pipeline system.

5. A summary of all events, incidents and issues which had the potential to or actually did adversely impact pipeline system integrity, the environment, or worker or public safety and a summary of the lessee's response.

6. A summary of all oil and hazardous substance discharges including date, substance, quantity, location, cause, and cleanup actions undertaken. Minor discharges below agreed upon thresholds may be grouped into monthly total amounts, provided the number of separate incidents is reported.

7. Any additional information requested by the State Pipeline Coordinator.

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Appendix C – Missions and Measures

The Office of Management and Budgeting (OMB) within the Governor's Office implements Missions and Measures to "ensure the State's resources are invested in a way that produces results which advance the governor's priorities." For information about Missions and Measures, please visit OMB at www.gov.state.ak.us/omb/results/.

SPCO Mission

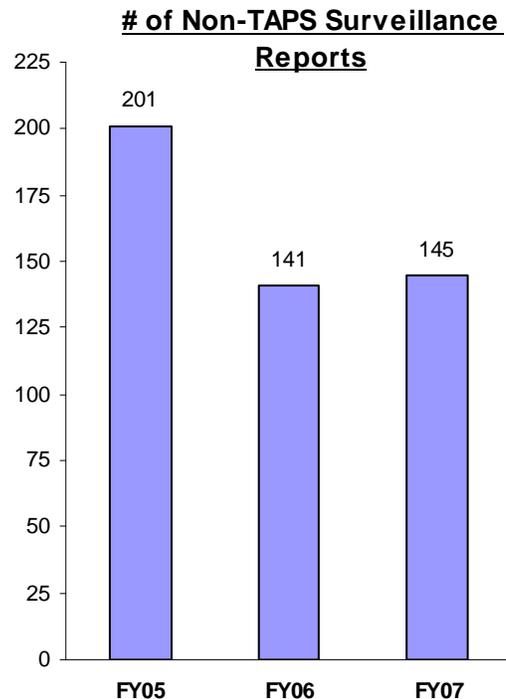
"To encourage and facilitate the development and sound operation of pipelines on State land."

Desired Result:

"Assure pipelines administered by the State Pipeline Coordinator's Office are designed, constructed, operated, and maintained in a safe and environmentally-sound manner consistent with lease requirements and applicable laws."

SPCO Core Services:

- "Process applications under the Alaska Lands Act and Right-of-Way Leasing Act and negotiate and deliver pipeline and other right-of-way leases in a manner that serves the State's interests."
- "Administer leases under SPCO jurisdiction including revenue, permitting, authorizations, and oversight of the construction, operations, maintenance, and termination of pipelines on State leased land. "
- "Coordinate SPCO Trans-Alaska Pipeline System Lease oversight with the U.S. Bureau of Land Management to ensure that TAPS remains available for delivery of North Slope crude oil to market."
- "Keep the public informed of SPCO activities."



To assess how the SPCO is performing under its mission and desired results, targets and measures are developed. For the SPCO-administered pipelines other than TAPS, the target is to "perform, document, and approve operational and project activities to ensure compliance with lease requirements and applicable laws through surveillances, technical reviews/reports, and assessments." The number of surveillances conducted is used to measure the SPCO's performance under this target.

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Appendix D – Sources of More Information on the Web

State Agencies

State Pipeline Coordinator's Office http://www.jpo.doi.gov/SPCO/SPCO.htm	Joint Pipeline Office http://www.jpo.doi.gov
Alaska Dept. of Environmental Conservation http://www.dec.state.ak.us	Alaska Dept. of Natural Resources http://www.dnr.state.ak.us/
AK. Oil & Gas Conservation Commission http://www.aogcc.alaska.gov	Regulatory Commission of Alaska http://www.state.ak.us/rca
AK. Dept. of Transportation & Public Facilities http://www.dot.state.ak.us	AK. Dept. of Fish & Game http://www.adfg.state.ak.us/

Federal Agencies

Joint Pipeline Office http://www.jpo.doi.gov	Bureau of Land Management http://www.blm.gov
Occupational Safety & Health Administration http://www.osha.gov	US Fish & Wildlife Service http://www.fws.gov
US Dept. of Transportation http://www.dot.gov	USDOT Office of Pipeline Safety http://ops.dot.gov
US Environmental Protection Agency http://www.epa.gov	US Army Corps of Engineers http://www.usace.army.mil

Pipeline Operators and ROW Lessees*

BP http://www.bp.com	BP Alaska http://alaska.bp.com
ConocoPhillips Company http://www.conocophillips.com	ConocoPhillips Alaska Inc. http://www.conocophillipsalaska.com
Tesoro Corporation http://www.tsocorp.com	Marathon Oil Corporation http://www.marathon.com
North Slope Borough http://co.north-slope.ak.us	

**Note: not all pipeline operators and ROW lessees mentioned in this report are listed above because either they do not have, or we could not locate, websites.*

Meet the SPCO Lease Compliance Oversight Team

Team Lead: Bruce Novinska

Bruce Novinska joined the SPCO in February 2005 after working in ADNR's Coal Mining Section where he served as the State Surface Coal Mine Permitter, Reclamation Planning Specialist, and later the Abandoned Mine Lands Program Field Lead. He has extensive knowledge and experience related to permitting, mining, environmental inspection, and reclamation. Bruce earned two Bachelor of Science degrees in Biology (botany emphasis) and Reclamation related to drastically disturbed lands with an English minor from the University of Wisconsin at Platteville. Bruce has attended numerous classes and seminars including: Cost Value Engineering, HAZWOPER 40-hour, Pipeline Pigging and Defect Assessment from Clarion, DNV Internal Auditor 9001/2000, and API 570 In-Service Piping Inspection.



Team Member: Britt K. Arnesen

Britt joined the SPCO in December 2005. She previously served as an ADF&G Fishery Biologist in the commercial groundfish ageing unit in Juneau. Britt has performed environmental field work in a variety of subjects including cultural resources, arctic and permafrost ecology, fisheries, glaciology, geology, and wildlife conservation. Britt maintains a HAZWOPER 40-hour certification and has taken the API 570 In-Service Piping Inspection course from CodeWest. Britt received her Bachelor of Science degree in Biology from the University of Alaska Fairbanks in 2002. Britt is the primary author of the SPCO Lease Compliance Monitoring Report and performs field surveillances.

Team Member: Ann Wright

Ann has worked for the SPCO since June 2004. She joined the compliance team in early 2007 to share her expertise in databases and great organizational skills. Ann conducts case file and other research for compliance issues, handles correspondence for the team, and maintains a series of compliance databases. Ann has a bachelor's degree in elementary education from Alaska Pacific University.